# DEPARTMENT OF AGRICULTURE APPROPRIATIONS, 1953

**TUESDAY, MARCH 11, 1952**

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D. C.*

The subcommittee met at 10:30 a. m., pursuant to recess, in room F-37, The Capitol, Hon. Richard B. Russell (chairman of the subcommittee) presiding.

Present: Senators Russell, Hayden, and Ellender.

## DEPARTMENT OF AGRICULTURE

BREAKDOWN OF TOTAL BUDGET ESTIMATE

### STATEMENTS OF RALPH S. ROBERTS, DIRECTOR OF FINANCE AND BUDGET OFFICER, AND JOSEPH C. WHEELER, DEPUTY DIRECTOR OF FINANCE

COMPARATIVE STATEMENT OF ESTIMATES

Senator RUSSELL. The committee will come to order. Mr. Roberts, I believe you have a statement.

Mr. ROBERTS. Mr. Chairman, we welcome the opportunity of appearing before your committee to discuss the Department of Agriculture's budget for 1953.

At the outset of the hearings in the House on these 1953 budget estimates, we included a very comprehensive general statement on the budget, and inserted in the record a number of general tables. In view of the fact that that information is available to this committee through the House hearings, Mr. Cooper and I discussed the matter and decided that perhaps it would not be necessary, unless the committee desired otherwise, to repeat the budget summary and include those general tables in the hearings here.

Senator RUSSELL. Those hearings will be available to the members of this committee and, as a matter of fact, are available now. So I see no reason why we should repeat them in the record here in detail.

Mr. ROBERTS. We have furnished a set of such tables for each individual member of the committee. It may be desirable, Mr. Chairman, to include at the beginning of these hearings three of the principal tables showing the appropriations for 1951 and 1952, and the budget estimates for 1953. They are tables 1, 2, and 3 in the book of tables we have provided for the members of the committee.

(The tables referred to follow:)

TABLE 1.—*Budget estimates, 1953, compared with appropriations and REA and FHA loan authorizations, 1952*

[NOTE.—Amounts for 1952 are adjusted for comparability with the appropriation structure proposed in the 1953 budget estimates]

| Bureau or item | Appropriations and loan authorizations, including estimated pay adjustment supplementals, 1952 | Budget estimates, 1953 | Increase (+) or decrease (−) |
|---|---|---|---|
| Annual appropriations for regular activities: | | | |
| Production and Marketing Administration: | | | |
| Conservation and use of agricultural land resources | $260,000,000 | $256,500,000 | −$3,500,000 |
| Farm restoration program in flood-stricken areas | 16,480,000 | | −16,480,000 |
| Agricultural production programs | 10,000,000 | 15,000,000 | +5,000,000 |
| Sugar Act program | 70,000,000 | 70,000,000 | |
| National school-lunch program | 83,367,491 | 83,367,491 | |
| Marketing services | 11,540,000 | 11,465,000 | −75,000 |
| Total, Production and Marketing Administration (excluding Commodity Credit Corporation) | 451,387,491 | 436,332,491 | −15,055,000 |
| Salaries and expenses, defense production activities | 1,500,000 | (1) | −1,500,000 |
| Commodity Exchange Authority | 662,000 | 725,000 | +63,000 |
| Soil Conservation Service | 56,974,991 | 60,740,000 | +3,765,009 |
| Emergency channel restoration in flood-stricken areas | 1,960,000 | | −1,960,000 |
| Water conservation and utilization projects | 235,500 | 235,500 | |
| Federal Crop Insurance Corporation | 7,949,911 | 9,100,000 | +1,150,089 |
| Farmers' Home Administration: | | | |
| Salaries and expenses | 29,570,000 | 29,350,000 | −220,000 |
| Disaster loan revolving fund (flood relief and rehabilitation) | 30,000,000 | | −30,000,000 |
| Rural Electrification Administration (administrative expenses) | 8,290,000 | 8,425,000 | +135,000 |
| Farm Credit Administration: | | | |
| Direct appropriation | 431,000 | 431,000 | |
| Assessments against member institutions of the Farm Credit system | 2,322,100 | 2,322,100 | |
| Agricultural Research Administration: | | | |
| Office of Administrator (including Agricultural Research Center) | 582,440 | 581,000 | −1,440 |
| Research on agricultural problems of Alaska | 270,000 | 270,000 | |
| Office of Experiment Stations (principally payments to States) | 12,818,798 | 12,842,708 | +23,910 |
| Virgin Islands agricultural program | | 100,000 | +100,000 |
| Bureau of Human Nutrition and Home Economics | 1,436,000 | 1,430,000 | −6,000 |
| Bureau of Animal Industry | 25,965,000 | 25,818,000 | −147,000 |
| Bureau of Dairy Industry | 1,573,000 | 1,621,000 | +48,000 |
| Bureau of Agricultural and Industrial Chemistry | 7,700,000 | 7,689,000 | −11,000 |
| Bureau of Plant Industry, Soils, and Agricultural Engineering | 11,484,650 | 11,696,000 | +211,350 |
| Bureau of Entomology and Plant Quarantine: | | | |
| Control of emergency outbreaks of insects and plant diseases | 1,000,000 | 1,000,000 | |
| Other work of the Bureau | 12,448,000 | 12,300,000 | −148,000 |
| Total, Agricultural Research Administration | 75,277,888 | 75,347,708 | +69,820 |
| Agricultural Marketing Act (RMA—title II) | 4,972,000 | 5,500,000 | +528,000 |
| Control of forest pests | 6,000,000 | 8,000,000 | +2,000,000 |
| Forest Service (excluding forest development roads and trails) | 52,070,308 | 54,244,680 | +2,174,372 |
| Forest development roads and trails | 13,000,000 | 13,000,000 | |
| Flood control | 6,559,600 | 7,750,000 | +1,190,400 |
| Extension Service (principally payment to States) | 28,043,000 | 28,074,129 | +31,129 |

[1] Detailed estimate for fiscal year 1953 to be submitted later.

TABLE 1.—*Budget estimates, 1953, compared with appropriations and REA and FHA loan authorizations, 1952*—Continued

| Bureau or item | Appropriations and loan authorizations, including estimated pay adjustment supplementals, 1952 | Budget estimates, 1953 | Increase (+) or decrease (−) |
|---|---|---|---|
| Annual appropriations for regular activities—Con. | | | |
| Bureau of Agricultural Economics | $5,407,304 | $5,565,000 | +$157,696 |
| Office of the Secretary (including immediate Office of the Secretary, Offices of Budget and Finance, Plant, and Operations, Personnel, and Hearing Examiners) | 2,185,000 | 2,360,000 | +175,000 |
| Office of Solicitor | 2,372,000 | 2,356,000 | −16,000 |
| Office of Foreign Agricultural Relations | 615,000 | 750,000 | +135,000 |
| Office of Information | 1,263,268 | 1,259,000 | −4,268 |
| Library | 687,237 | 682,000 | −5,237 |
| Total, annual appropriations for regular activities | 789,735,598 | 752,549,608 | −37,185,990 |
| Deduct amounts, included above, appropriated from other than the general fund of the Treasury | −3,163,780 | −3,163,780 | |
| Total, annual appropriations for regular activities from the general fund of the Treasury | 786,571,818 | 749,385,828 | −37,185,990 |
| Loan authorizations: | | | |
| Rural Electrification Administration loans: | | | |
| Rural electrification [3] | 100,000,000 | 50,000,000 | −50,000,000 |
| Rural telephone | [2] 9,000,000 | 25,000,000 | +16,000,000 |
| Total, Rural Electrification Administration | 109,000,000 | 75,000,000 | −34,000,000 |
| Farmers' Home Administration loans: | | | |
| Farm ownership and farm housing | 38,000,000 | 38,000,000 | |
| Production and subsistence | 110,000,000 | 110,000,000 | |
| Water facilities | 5,000,000 | 6,000,000 | +1,000,000 |
| Total, Farmers' Home Administration | 153,000,000 | 154,000,000 | +1,000,000 |
| Total, loan authorizations | 262,000,000 | 229,000,000 | −33,000,000 |
| Corporate administrative expense limitations: | | | |
| Commodity Credit Corporation [4] | 17,580,000 | 17,876,000 | +296,000 |
| Federal Farm Mortgage Corporation | 1,100,000 | 950,000 | −150,000 |
| Federal intermediate credit banks | 1,549,756 | 1,690,000 | +140,244 |
| Production credit corporations | 1,407,015 | 1,465,000 | +57,985 |
| Total, corporate administrative expense limitations | 21,636,771 | 21,981,000 | +344,229 |
| Special activities: | | | |
| Appropriation for research on agricultural materials or substitutes determined by the Munitions Board to be strategic and critical as required by the Strategic and Critical Materials Stock Piling Act | 582,000 | 625,000 | +43,000 |
| Appropriation to cover difference between cost of wheat purchased at domestic market price and receipts from sales at maximum price prescribed by the International Wheat Agreement | 76,808,000 | 182,162,250 | +105,354,250 |
| Total, special activities [5] | 77,390,000 | 182,787,250 | +105,397,250 |
| Permanent appropriations: | | | |
| Removal of surplus agricultural commodities (30 percent of customs receipts) | 158,886,746 | 181,000,000 | +22,113,254 |
| All other permanent appropriations | 27,638,644 | 28,966,444 | +1,327,800 |
| Total, permanent appropriations | 186,525,390 | 209,966,444 | +23,441,054 |

[3] Including the carry-over of funds from prior year, a loan program of $165,000,000 is planned for each of the fiscal years 1952 and 1953.

[2] Including the carry-over of funds from prior year, a loan program of $25,000,000 is planned for 1952.

[4] Budget proposes language authorizing the Secretary of the Treasury to cancel notes issued by the Corporation to the Treasury in an amount not to exceed $120,000,000, as determined by Treasury appraisal, to restore the capital impairment of the Commodity Credit Corporation.

[5] Budget proposes language authorizing the Secretary of the Treasury to cancel notes issued by the Commodity Credit Corporation to the Treasury in the amount of $11,240,532 for costs incurred in fiscal year 1951 in connection with the program for eradication of foot-and-mouth disease.

TABLE 2.—*Subappropriations, appropriations, and REA and FHA loan authorizations, 1951 and 1952 (including estimated pay adjustment supplementals), and budget estimates, 1953*

[NOTE.—Amounts for 1951 and 1952 include all supplemental appropriations to date and are adjusted for comparability with the appropriation structure proposed in the 1953 budget estimates]

| Bureau or item | Appropriations and loan authorizations, 1951 after reductions under sec. 1214 | Appropriations and loan authorizations, 1952 | | | Budget estimates, 1953 | Increase (+), or decrease (−), budget estimates, 1953, compared with total estimated available, 1952 |
|---|---|---|---|---|---|---|
| | | Actual appropriations and loan authorizations | Estimated supplemental (pay adjustment costs) | Total estimated available | | |
| Annual appropriations for regular activities: | | | | | | |
| Agricultural Marketing Act (RMA—title II) | $5,932,000 | $4,750,000 | $222,000 | $4,972,000 | $5,500,000 | +$528,000 |
| Bureau of Agricultural Economics: | | | | | | |
| Economic investigations | 2,535,000 | 2,150,000 | 173,000 | 2,323,000 | 2,507,000 | +184,000 |
| Crop and livestock estimates | 2,904,000 | 2,848,304 | 236,000 | 3,084,304 | 3,058,000 | −26,304 |
| Total | 5,439,000 | 4,998,304 | 409,000 | 5,407,304 | 5,565,000 | +157,696 |
| Agricultural Research Administration: | | | | | | |
| Office of Administrator | 585,816 | 541,440 | 41,000 | 582,440 | 581,000 | −1,440 |
| Working capital fund, Agricultural Research Center | 300,000 | | | | | |
| Research on agricultural problems of Alaska | 280,000 | 250,000 | 20,000 | 270,000 | 270,000 | |
| Office of Experiment Stations: | | | | | | |
| Payments to States: | | | | | | |
| Hatch Act | 720,000 | 720,000 | | 720,000 | 720,000 | |
| Adams Act | 720,000 | 720,000 | | 720,000 | 720,000 | |
| Purnell Act | 2,880,000 | 2,880,000 | | 2,880,000 | 2,880,000 | |
| Bankhead-Jones Act, title I, secs. 3–5 | 2,863,708 | 2,863,708 | | 2,863,708 | 2,863,708 | |
| Bankhead-Jones Act, title I, sec 9 (sec. 9, Research and Marketing Act, 1946) | 5,000,000 | 5,000,000 | | 5,000,000 | 5,000,000 | |
| Hawaii | 90,000 | 90,000 | | 90,000 | 90,000 | |
| Alaska | 52,500 | 65,000 | | 65,000 | 90,000 | +25,000 |
| Puerto Rico | 90,000 | 90,000 | | 90,000 | 90,000 | |
| Total, payments to States | 12,416,208 | 12,428,708 | | 12,428,708 | 12,453,708 | +25,000 |
| Salaries and expenses | 407,500 | 367,090 | 23,000 | 390,090 | 389,000 | −1,090 |
| Virgin Islands agricultural program | | | | | 100,000 | +100,000 |
| Total | 12,823,708 | 12,795,798 | 23,000 | 12,818,798 | 12,942,708 | +123,910 |
| Bureau of Human Nutrition and Home Economics | 1,483,100 | 1,350,000 | 86,000 | 1,436,000 | 1,430,000 | −6,000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Bureau of Animal Industry: | | | | | | |
| Salaries and expenses: | | | | | | |
| Animal research | 3,701,000 | 3,510,000 | 188,000 | 3,698,000 | 3,681,000 | −17,000 |
| Animal disease control and eradication [1] | 8,237,145 | 8,090,000 | 427,000 | 8,517,000 | 8,477,000 | −40,000 |
| Meat inspection | 12,799,600 | 12,800,000 | 950,000 | 13,750,000 | 13,660,000 | −90,000 |
| Total | 24,737,745 | 24,400,000 | 1,565,000 | 25,965,000 | 25,818,000 | −147,000 |
| Bureau of Dairy Industry | 1,589,500 | 1,475,000 | 98,000 | 1,573,000 | 1,621,000 | +48,000 |
| Bureau of Agricultural and Industrial Chemistry | 7,970,000 | 7,250,000 | 450,000 | 7,700,000 | 7,689,000 | −11,000 |
| Bureau of Plant Industry, Soils, and Agricultural Engineering: | | | | | | |
| Plant, soil, and agricultural engineering research | [2] 10,695,350 | 10,589,730 | 745,920 | 11,335,650 | 11,547,000 | +211,350 |
| National Arboretum | 148,650 | 136,920 | 12,080 | 149,000 | 149,000 | |
| Total | 10,844,000 | 10,726,650 | 758,000 | 11,484,650 | 11,696,000 | +211,350 |
| Bureau of Entomology and Plant Quarantine: | | | | | | |
| Salaries and expenses: | | | | | | |
| Insect investigations | 4,061,300 | 3,650,000 | 265,500 | 3,915,500 | 3,869,000 | −46,500 |
| Insect and plant disease control | 5,684,500 | 5,400,000 | 339,900 | 5,739,900 | 5,672,000 | −67,900 |
| Plant quarantines | 2,388,500 | 2,600,000 | 192,600 | 2,792,600 | 2,759,000 | −33,600 |
| Total, salaries and expenses | 12,134,300 | 11,650,000 | 798,000 | 12,448,000 | 12,300,000 | −148,000 |
| Control of emergency outbreaks of insects and plant diseases | [3] 1,250,000 | [3] 1,000,000 | | [3] 1,000,000 | [3] 1,000,000 | |
| Total | 13,384,300 | 12,650,000 | 798,000 | 13,448,000 | 13,300,000 | −148,000 |
| Total, Agricultural Research Administration | 73,998,169 | 71,438,888 | 3,839,000 | 75,277,888 | 75,347,708 | +69,820 |
| Control of forest pests: | | | | | | |
| Forest Pest Control Act | [4] 1,650,000 | [3] 2,700,000 | | [3] 2,700,000 | [3] 4,000,000 | +1,300,000 |
| White pine blister rust | 3,429,000 | 3,300,000 | | 3,300,000 | 4,000,000 | +700,000 |
| Total | 5,079,000 | 6,000,000 | | 6,000,000 | 8,000,000 | +2,000,000 |
| Forest Service: | | | | | | |
| Salaries and expenses: | | | | | | |
| National forest protection and management | 27,408,405 | 27,322,025 | 1,492,000 | 28,814,025 | 30,018,000 | +1,203,975 |
| Fighting forest fires | [5] 6,000,000 | [5] 6,000,000 | | [5] 6,000,000 | [5] 6,000,000 | |
| Forest research | 5,302,700 | 5,108,603 | 308,000 | 5,416,603 | 5,397,000 | −19,603 |
| Total, salaries and expenses | 38,711,105 | 38,430,628 | 1,800,000 | 40,230,628 | 41,415,000 | +1,184,372 |
| Forest development roads and trails | [7] 13,737,500 | 13,000,000 | | 13,000,000 | 13,000,000 | |
| Smoke jumper facilities | | | | | 970,000 | +970,000 |
| Acquisition of lands for national forests: | | | | | | |
| Weeks Act | 271,000 | 75,000 | | 75,000 | 75,000 | |
| Superior National Forest | 150,000 | 125,000 | | 125,000 | 150,000 | +25,000 |
| Acquisition of lands from national forest receipts | 137,838 | 141,680 | | 141,680 | 141,680 | |
| State and private forestry cooperation | 10,863,600 | 10,750,000 | 48,000 | 10,798,000 | 10,793,000 | −5,000 |
| Cooperative range improvements | 700,000 | 700,000 | | 700,000 | 700,000 | |
| Total | 64,571,043 | 63,222,308 | 1,848,000 | 65,070,308 | 67,244,680 | +2,174,372 |

See footnotes at end of table, p. 59.

TABLE 2.—*Subappropriations appropriations and REA and FHA loan authorizations, 1951 and 1952 (including estimated pay adjustment supplementals), and budget estimates, 1953*—Continued

[NOTE.—Amounts for 1951 and 1952 include all supplemental appropriations to date and are adjusted for comparability with the appropriation structure proposed in the 1953 budget estimates]

| Bureau or item | Appropriations and loan authorizations, 1951 after reductions under sec. 1214 | Appropriations and loan authorizations, 1952 | | | Budget estimates, 1953 | Increase (+), or decrease (−), budget estimates, 1953, compared with total estimated available, 1952 |
|---|---|---|---|---|---|---|
| | | Actual appropriations and loan authorizations | Estimated supplemental (pay adjustment costs) | Total estimated available | | |
| Annual appropriations for regular activities—Continued | | | | | | |
| Flood control | [8] $6,112,800 | [8] $6,559,600 | | [8] $6,559,600 | $7,750,000 | +$1,190,400 |
| Soil Conservation Service | 54,940,632 | 53,474,991 | $3,500,000 | 56,974,991 | 60,740,000 | +3,765,009 |
| Emergency channel restoration in flood-stricken areas | | [10] 1,960,000 | | [10] 1,960,000 | | −1,960,000 |
| Water conservation and utilization projects | [8] 185,500 | [8] 235,500 | | [8] 235,500 | 235,500 | |
| Production and Marketing Administration: | | | | | | |
| Conservation and use of agricultural land resources | 256,500,000 | 260,000,000 | | 260,000,000 | 256,500,000 | −3,500,000 |
| Farm restoration program in flood-stricken areas | | [10] 16,480,000 | | [10] 16,480,000 | | −16,480,000 |
| Agricultural production programs | 23,050,000 | 10,000,000 | | 10,000,000 | 15,000,000 | +5,000,000 |
| Sugar Act program | 63,750,000 | 70,000,000 | | 70,000,000 | 70,000,000 | |
| National school-lunch program | 83,500,000 | 83,367,491 | | 83,367,491 | 83,367,491 | |
| Marketing services | 10,828,000 | 10,800,000 | 740,000 | 11,540,000 | 11,465,000 | −75,000 |
| Commodity Exchange Authority | 650,000 | 650,000 | 12,000 | 662,000 | 725,000 | +63,000 |
| Federal Crop Insurance Corporation | 7,095,625 | 7,949,911 | | 7,949,911 | 9,100,000 | +1,150,089 |
| Rural Electrification Administration (salaries and expenses) | 8,270,992 | 7,750,000 | 540,000 | 8,290,000 | 8,425,000 | +135,000 |
| Farmers' Home Administration: | | | | | | |
| Salaries and expenses | 23,199,752 | 27,825,000 | 1,745,000 | 29,570,000 | 29,350,000 | −220,000 |
| Grants (farm-housing program) | 400,000 | [11] | | [11] | [11] | |
| Disaster loan revolving fund (flood relief and rehabilitation) | | [12] 30,000,000 | | [12] 30,000,000 | | −30,000,000 |
| Total | 28,599,752 | 57,825,000 | 1,745,000 | 59,570,000 | 29,350,000 | −30,220,000 |
| Farm Credit Administration: | | | | | | |
| Direct appropriation | 579,700 | 400,000 | 31,000 | 431,000 | 431,000 | |
| Assessments against member institutions of the Farm Credit System | 2,203,691 | 2,322,100 | | 2,322,100 | 2,322,100 | |
| Extension Service: | | | | | | |
| Payments to States: | | | | | | |
| Capper-Ketcham Act | 1,480,000 | 1,480,000 | | 1,480,000 | 1,480,000 | |
| Bankhead-Jones Act, title II: | | | | | | |
| Section 21 | 12,000,000 | 12,000,000 | | 12,000,000 | 12,000,000 | |
| Section 23 | 12,500,000 | 12,500,000 | | 12,500,000 | 12,500,000 | |
| Additional extension work | 555,000 | 555,000 | | 555,000 | 555,000 | |
| Alaska | 56,100 | 56,100 | | 56,100 | 59,858 | +3,758 |
| Puerto Rico | 479,348 | 510,850 | | 510,850 | 541,221 | +30,371 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Farm Housing Act of 1949 (title V, sec. 506 (a)) | 33,050 | 33,050 | | 33,050 | 33,050 | |
| Total, payments to States | 27,103,498 | 27,135,000 | | 27,135,000 | 27,169,129 | +34,129 |
| Salaries and expenses | 888,500 | 850,000 | 58,000 | 908,000 | 905,000 | −3,000 |
| Total | 27,991,998 | 27,985,000 | 58,000 | 28,043,000 | 28,074,129 | +31,129 |
| Office of the Secretary | 2,145,884 | 2,025,000 | 160,000 | 2,185,000 | 2,360,000 | +175,000 |
| Salaries and expenses, Defense Production Activities | | [13] 1,500,000 | | [13] 1,500,000 | [14] | −1,500,000 |
| Office of Solicitor | 2,474,100 | 2,200,000 | 172,000 | 2,372,000 | 2,356,000 | −16,000 |
| Office of Foreign Agricultural Relations | 600,000 | 575,000 | 40,000 | 615,000 | 750,000 | +135,000 |
| Office of Information | 1,270,500 | 1,215,268 | 48,000 | 1,263,268 | 1,259,000 | −4,268 |
| Library | 702,593 | 641,237 | 46,000 | 687,237 | 682,000 | −5,237 |
| Total, annual appropriations for regular activities | 736,470,979 | 776,325,598 | 13,410,000 | 789,735,598 | 752,549,608 | −37,185,990 |
| Deduct items included above, appropriated from other than the general fund of the Treasury: | | | | | | |
| Acquisition of lands from national forest receipts | 137,838 | 141,680 | | 141,680 | 141,680 | |
| Cooperative range improvements | 700,000 | 700,000 | | 700,000 | 700,000 | |
| Assessments against member institutions of the Farm Credit system | 2,203,691 | 2,322,100 | | 2,322,100 | 2,322,100 | |
| Total | 3,041,529 | 3,163,780 | | 3,163,780 | 3,163,780 | |
| Total, annual appropriations for regular activities from the general fund of the Treasury | 733,429,450 | 773,161,818 | 13,410,000 | 786,571,818 | 749,385,828 | −37,185,990 |
| Loan authorizations: | | | | | | |
| Rural Electrification Administration loans: | | | | | | |
| Rural electrification [15] | 264,500,000 | 100,000,000 | | 100,000,000 | 50,000,000 | −50,000,000 |
| Rural telephone | 32,500,000 | [16] 9,000,000 | | 9,000,000 | 25,000,000 | +16,000,000 |
| Total, Rural Electrification Administration | 297,000,000 | 109,000,000 | | 109,000,000 | 75,000,000 | −34,000,000 |
| Farmers' Home Administration loans: | | | | | | |
| Farm ownership and farm housing | [17] 40,500,000 | [18] 38,000,000 | | [18] 38,000,000 | 38,000,000 | |
| Production and subsistence | [19] 103,000,000 | 110,000,000 | | 110,000,000 | 110,000,000 | |
| Water facilities | 4,000,000 | 5,000,000 | | 5,000,000 | 6,000,000 | +1,000,000 |
| Total, Farmers' Home Administration | 147,500,000 | 153,000,000 | | 153,000,000 | 154,000,000 | +1,000,000 |
| Total, loan authorizations | 444,500,000 | 262,000,000 | | 262,000,000 | 229,000,000 | −33,000,000 |
| Corporate administrative expense limitations: | | | | | | |
| Commodity Credit Corporation [20] | [21] 19,100,000 | 16,500,000 | 1,080,000 | 17,580,000 | 17,876,000 | +296,000 |
| Federal Farm Mortgage Corporation | 1,280,000 | 1,100,000 | | 1,100,000 | 950,000 | −150,000 |
| Federal intermediate credit banks | 1,496,000 | 1,496,000 | 53,756 | 1,549,756 | 1,690,000 | +140,244 |
| Production credit corporations | 1,358,000 | 1,358,000 | 49,015 | 1,407,015 | 1,465,000 | +57,985 |
| Total, corporate administrative expense limitations | 23,234,000 | 20,454,000 | 1,182,771 | 21,636,771 | 21,981,000 | +344,229 |

See footnotes at end of table, p. 59.

TABLE 2.—*Subappropriations, appropriations, and REA and FHA loan authorizations, 1951 and 1952 (including estimated pay adjustment supplementals), and budget estimates, 1953*—Continued

[NOTE.—Amounts for 1951 and 1952 include all supplemental appropriations to date and are adjusted for comparability with the appropriation structure proposed in the 1953 budget estimates]

| Bureau or item | Appropriations and loan authorizations, 1951 after reductions under sec. 1214 | Appropriations and loan authorizations, 1952 | | | Budget estimates, 1953 | Increase (+), or decrease (−), budget estimates, 1953, compared with total estimated available, 1952 |
|---|---|---|---|---|---|---|
| | | Actual appropriations and loan authorizations | Estimated supplemental (pay adjustment costs) | Total estimated available | | |
| Special activities: | | | | | | |
| Appropriation for research on agricultural materials or substitutes determined by the Munitions Board to be strategic and critical as required by the Strategic and Critical Materials Stock Piling Act | $399,000 | $550,000 | $32,000 | $582,000 | $625,000 | +$43,000 |
| Appropriation to cover difference between cost of wheat purchased at domestic market price and receipts from sales at maximum price prescribed by the International Wheat Agreement | | 76,808,000 | | 76,808,000 | 182,162,250 | +105,354,250 |
| Total, special activities [32] | 399,000 | 77,358,000 | 32,000 | 77,390,000 | 182,787,250 | +105,397,250 |
| Permanent appropriations: | | | | | | |
| General fund appropriations: | | | | | | |
| Payments to school funds, Arizona and New Mexico, national forests fund | 71,930 | 107,294 | | 107,294 | 107,294 | |
| Removal of surplus agricultural commodities (30 percent of customs receipts) | [33] 111,192,249 | [33] 158,886,746 | | [33] 158,886,746 | [22] 181,000,000 | +22,113,254 |
| Cooperative agricultural extension work | 4,704,710 | 4,711,250 | | 4,711,250 | 4,711,250 | |
| Total | 115,968,889 | 163,705,290 | | 163,705,290 | 185,818,544 | +22,113,254 |
| Appropriations from special sources: | | | | | | |
| Expenses, brush disposal, Forest Service | 387,763 | 1,400,000 | | 1,400,000 | 1,400,000 | |
| Payments to Minnesota (Cook, Lake, and St. Louis Counties) from the national forests fund | 43,548 | 45,000 | | 45,000 | 45,000 | |
| Payments to States and Territories from the national forests fund | 8,362,897 | 13,975,000 | | 13,975,000 | 15,020,000 | +1,045,000 |
| Roads and trails for States, national forests fund | 3,346,439 | 5,600,000 | | 5,600,000 | 6,000,000 | +400,000 |
| Payments due counties, submarginal land program, Farm Tenant Act | 271,758 | 298,000 | | 298,000 | 344,000 | +46,000 |
| Perishable Agricultural Commodities Act fund | 570,440 | 390,000 | | 390,000 | 390,000 | |
| Replacement of personal property sold | 906,772 | 1,112,100 | | 1,112,100 | 948,900 | −163,200 |
| Total | 13,889,617 | 22,820,100 | | 22,820,100 | 24,147,900 | +1,327,800 |
| Total, permanent appropriations | 129,858,506 | 186,525,390 | | 186,525,390 | 209,966,444 | +23,441,054 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Trust funds: | | | | | | |
| Bureau of Animal Industry: | | | | | | |
| Expenses, feed, and attendants for animals in quarantine | 1,630 | 3,650 | | 3,650 | 3,650 | |
| Inspection of animal foods, animal industry, Agricultural Research Administration | 100,428 | 100,000 | | 100,000 | 100,000 | |
| Forest Service: | | | | | | |
| Cooperative work | 8,426,295 | 7,000,000 | | 7,000,000 | 7,000,000 | |
| State rural rehabilitation corporation funds | 13,651 | 14,214 | | 14,214 | 6,129 | −8,085 |
| Soil Conservation Service: Technical services and other assistance, agricultural conservation program | 195,814 | 200,000 | | 200,000 | 200,000 | |
| Production and Marketing Administration: Expenses and refunds, inspection and grading of farm products | 6,977,074 | 9,100,000 | | 9,100,000 | 9,300,000 | +200,000 |
| Farmers' Home Administration: | | | | | | |
| State rural rehabilitation corporation funds | 12,587,733 | 1,300,000 | | 1,300,000 | 400,000 | −900,000 |
| State rural rehabilitation funds, new agreements | 1,989,368 | 3,700,000 | | 3,700,000 | 6,600,000 | +2,900,000 |
| Office of Foreign Agricultural Relations: Advance from FAO for conducting a study of fighting forest fires for foreign trainees | | 33,000 | | 33,000 | | −33,000 |
| Miscellaneous contributed funds | 691,438 | 625,000 | | 625,000 | 525,900 | −99,100 |
| Total, trust funds | 30,983,431 | 22,075,864 | | 22,075,864 | 24,135,679 | +2,059,815 |

[1] Work on "Marketing agreements, hog cholera virus and serum" financed in 1951 by transfer from the appropriation made by sec. 12 (a) of the Agricultural Adjustment Act approved May 12, 1933.
[2] Includes $100,000 appropriated in the Supplemental Appropriation Act, 1951.
[3] Represents contingency fund for use only to the extent determined by the Secretary and the Bureau of the Budget.
[4] Includes $750,000 contingency fund for use only to the extent determined by the Secretary and the Bureau of the Budget.
[5] Includes $500,000 contingency fund for use only to the extent determined by the Secretary and the Bureau of the Budget.
[6] Includes $2,500,000 contingency fund for use only to the extent determined by the Secretary and the Bureau of the Budget.
[7] Includes $3,300,000 appropriated in Third Supplemental Appropriation Act, 1951.
[8] In addition, prior-year balances available.
[9] Includes $186,800 appropriated in Second Supplemental Appropriation Act, 1952. In addition, prior-year balances available.
[10] Appropriated in Flood Rehabilitation Act, 1952.
[11] Prior-year balances available.
[12] Appropriated in Flood Rehabilitation Act, 1952.
[13] Appropriated in Supplemental Appropriation Act, 1952.
[14] Detailed estimate for fiscal year 1953 to be submitted later.
[15] Including the carry-over of funds from prior year, a loan program of $165,000,000 is planned for each of the fiscal years 1952 and 1953.
[16] Including the carry-over of funds from prior year, a loan program of $25,000,000 is planned for 1952.
[17] In addition, $7,807,572 available from prior-year authorizations.
[18] In addition, $2,087,001 available from prior-year authorizations.
[19] Includes $18,000,000 authorized in the Supplemental Appropriation Act, 1951.
[20] Budget proposes language authorizing the Secretary of the Treasury to cancel notes issued by the Corporation to the Treasury in an amount not to exceed $120,000,000, as determined by Treasury appraisal, to restore the capital impairment of the Commodity Credit Corporation.
[21] Includes $2,750,000 authorized in Third Supplemental Appropriation Act, 1951.
[22] Budget proposes language authorizing the Secretary of the Treasury to cancel notes issued by the Commodity Credit Corporation to the Treasury in the amount of $11,240,532 for costs incurred in fiscal year 1951 in connection with the program for eradication of foot-and-mouth disease.
[23] In addition, prior-year balances available.

TABLE 3.—*Statement of increases and decreases, budget estimates, 1953, compared with appropriations and REA and FHA loan authorizations, 1952*

[Based on appropriations and authorizations for 1952, including estimated pay adjustment supplementals, and adjusted for comparability with the appropriation structure proposed in the 1953 budget estimates]

| | | |
|---|---|---|
| Annual appropriations for regular activities: | | |
| Total appropriations, 1952 | | $776,325,598 |
| Estimated supplemental appropriations for pay adjustment, 1952 | | 13,410,000 |
| Total estimated available, 1952 | | 789,735,598 |
| Budget estimates, 1953 | | 752,549,608 |
| Net decrease, 1953 | | −37,185,990 |
| Increases: | | |
| Production and Marketing Administration: Agricultural production programs (increases of (1) $4,661,246 to assure needed production of crops in short supply; and (2) $555,062 primarily for increased rates of pay for PMA county office personnel; and decrease of $216,308 due to elimination of nonrecurring expenses for completion of work on 1950 cotton marketing quotas) | +$5,000,000 | |
| Soil Conservation service: Salaries and expenses (increases of (1) $3,028,000 for technical and other assistance to new conservation districts; (2) $467,009 to provide additional technical assistance to those conservation districts which have been receiving only limited assistance; and (3) $530,000 for soil and water conservation work in reclamation areas) | +4,025,009 | |
| Forest Service: | | |
| Salaries and expenses (increases of (1) $1,086,603 for administration of timber sales; (2) $370,000 to strengthen fire control; and (3) $31,397 for research on halogeton) | +1,488,000 | |
| Smoke jumper facilities (increase for construction of facilities for fire-control operations at Missoula, Mont.) | +970,000 | |
| Control of forest pests: | | |
| Forest Pest Control Act (increases of (1) $1,152,000 for control of epidemics of forest insects and diseases; and (2) $148,000 to strengthen detection and appraisal surveys) | +1,300,000 | |
| White pine blister rust (increase to expand control operations in the Northwest) | +700,000 | |
| Flood control (due to availability of prior-year balances of $702,497 in fiscal year 1952, there will be a net increase of $487,903 in total funds available consisting of an increase of $647,105 for works of improvement on authorized watersheds and for general basin investigations in the Colorado River areas, and a decrease of $159,202 for flood control surveys) | +1,190,400 | |
| Federal Crop Insurance Corporation (increases of (1) $801,189 for servicing, collecting premiums, inspecting growing crops and adjusting losses on the 141,800 contract increase in crop year 1952; (2) $222,800 for developmental, introductory, sales, and service costs to add 60 counties and an estimated 24,400 contracts to the program in 1953; and (3) $126,100 for increases in rates in PMA servicing costs) | +1,150,089 | |
| Agricultural Research Administration (increases of (1) $100,000 to establish and operate an agricultural research and extension program in the Virgin Islands; (2) $25,000 to strengthen the research program of the Alaska Agricultural Experiment Station; (3) $50,000 to strengthen the dairy-herd improvement work; (4) $50,000 for development of products from pine oleoresin for military uses; (5) $350,000 for fertilizer research in cooperation with TVA; and (6) $198,000 for soil surveys and soil management investigations in reclamation areas, improved forage production in the South, and halogeton research) | +773,000 | |
| Agricultural Marketing Act (RMA—title II) (increase for additional marketing research, service, and educational work) | +528,000 | |
| Office of the Secretary (increases to strengthen the over-all personnel management program of the Department; to provide a central management staff for improvement in organization, procedures, etc.; for more effective liaison between the Department and the State commissioners, secretaries, and directors of agriculture; for coordination and direction of expanding programs of the Department; and to strengthen accounting systems and procedures, budgetary and financial reporting activities, central telephone-switchboard service and records-management activities) | +215,575 | |
| Rural Electrification Administration: Salaries and expenses (a net increase resulting from a decrease of $82,761 in administrative costs of the rural-electrification program, and an increase of $217,761 for the rural-telephone program) | +135,000 | |
| Bureau of Agricultural Economics: Economic investigations (increases of (1) $150,000 for analyses of economic problems of irrigation areas; and (2) $52,000 for research on farm costs and returns) | +202,000 | |
| Office of Foreign Agricultural Relations (increase to meet the demand for up-to-date information concerning agricultural conditions in foreign areas, to analyze the effect of trade barriers upon American agriculture, and to analyze and report on commodity problems arising from the international situation) | +135,000 | |
| Other increases | +122,129 | |
| | | +17,934,202 |

TABLE 3.—*Statement of increases and decreases, budget estimates, 1953, compared with appropriations and REA and FHA loan authorizations, 1952*—Continued

| | | |
|---|---|---|
| Annual appropriations for regular activities—Continued | | |
| Decreases: | | |
| Decreases due to elimination of items provided in the Flood Rehabilitation Act, 1952, as follows: | | |
| Farm-restoration program in flood-stricken areas | −$16,480,000 | |
| Emergency channel restoration in flood-stricken areas | −1,960,000 | |
| Disaster loans | −30,000,000 | |
| Conservation and use of agricultural land resources (decrease for the 1952 crop year agricultural conservation program in accordance with the advance authorization of $256,500,000 carried in the 1952 Agricultural Appropriation Act) | −3,300,000 | |
| Defense production activities (apparent decrease only, Budget contemplates submission of an estimate for 1953 at a later date) | −1,500,000 | |
| Bureau of Plant Industry, Soils, and Agricultural Engineering (decrease due to elimination of nonrecurring item provided in the 1952 Appropriation Act for construction of a citrus laboratory at Orlando, Fla.) | −275,000 | |
| Decreases due to providing a direct appropriation to the General Services Administration for certain leasing costs previously paid from appropriations of the Department | −126,224 | |
| Decrease in funds provided for pay adjustment costs | −1,278,968 | |
| | | −$55,120,192 |
| Net decrease, annual appropriations for regular activities | | −37,185,990 |
| Loan authorizations: | | |
| Rural Electrification Administration: | | |
| Rural electrification loans (due to carry-over of funds from prior years, a loan program of $165,000,000 is planned for each of the fiscal years 1952 and 1953) | −$50,000,000 | |
| Rural telephone loans (due to carry-over of funds from prior years, a loan program of $25,000,000 is planned for 1952) | +16,000,000 | |
| Farmers' Home Administration: Water facilities loans | +1,000,000 | |
| Net decrease, loan authorizations | | −33,000,000 |
| Corporate administrative expense limitations: | | |
| Commodity Credit Corporation (net increase consisting of an increase of $684,810 for cotton-price-support operations; and a decrease of $388,810 in other price-support operations, including a decrease of $240,000 in the contingency reserve for price-support operations) | +$296,000 | |
| Federal Farm Mortgage Corporation (decrease primarily in reimbursements to the Federal land banks for servicing land bank commissioner loans and other assets) | −150,000 | |
| Federal intermediate credit banks (increases of (1) $105,244 to handle increased volume of loans offered for discount and for related services and facilities; and (2) $35,000 to place on a full-year basis in 1953 pay adjustment costs which were in effect for only a part of the fiscal year 1952) | +140,244 | |
| Production credit corporations (increases of (1) $42,985 to strengthen supervision of the production credit associations; and (2) $15,000 to place on a full-year basis in 1953 pay adjustment costs which were in effect for only a part of the fiscal year 1952) | +57,985 | |
| Net increase, corporate administrative expense limitations | | +344,229 |
| Special activities: | | |
| Appropriation for research on agricultural materials or substitutes determined by the Munitions Board to be strategic and critical as required by the Strategic and Critical Stock Piling Act (increase of $93,000 for pilot-plant studies on the extraction of tannin from canaigre, and for research on fiber plants for cordage and for jute substitutes; and a decrease of $50,000 due to elimination of nonrecurring item) | +$43,000 | |
| Appropriation to cover difference between cost of wheat purchased at domestic market price and receipts from sales at maximum price prescribed by the International Wheat Agreement (increase primarily due to difference between 135,000,000 bushels of wheat and flour exported in 1950 and 266,000,000 bushels exported in 1951) | +105,354,250 | |
| Net increase, special activities | | +105,397,250 |
| Permanent appropriations: | | |
| Production and Marketing Administration: Removal of surplus agricultural commodities (increase arising from increased customs receipts in calendar year 1951) | +$22,113,254 | |
| Forest Service (increase in appropriations for payments to States and Territories, and for roads and trails for States arising from estimated increase in the receipts from national forest activities) | +1,445,000 | |
| Soil Conservation Service: Payments due counties, submarginal land program, Farm Tenant Act (increase arising from estimated increase in the receipts from the use of submarginal lands) | +46,000 | |
| Replacement of personal property sold (decrease resulting from estimated decrease in receipts from the sale of personal property, the replacement of which is authorized by law) | −163,200 | |
| Net increase, permanent appropriations | | 23,441,054 |

Mr. ROBERTS. Table 1 is the main-head, summary appropriation table. Being sensitive to the same point which the chairman raised yesterday during the discussions while the Secretary was here, we have modified the structure of this table to conform with the pattern used by the committee last year and have segregated as "Special activities" two items we do not consider to be, and which the committee last year did not consider to be, agricultural items. They are down near the bottom of the page and are as follows:

$625,000 for research on critical and strategic agricultural materials, work which is done by the Department of Agriculture at the request of the Munitions Board under the Critical Materials Stockpiling Act.

The other item is the International Wheat Agreement which we talked about yesterday.

There is also one other point I should mention regarding this table. You will notice that in the 1952 column we have included not only the appropriations and authorizations enacted for the fiscal year 1952 but also the estimated supplemental appropriation for pay-act adjustments under Public Law 201. This has been done in order to get the 1952 column, with respect to each program, on a basis comparable with the budget estimates for 1953, since the budget estimates for 1953 carry provision for salaries at the increased rates authorized in Public Law 201, which was passed last fall.

Senator HAYDEN. If you did not do that, you would have to be explaining it in each instance.

Mr. ROBERTS. That is correct, sir.

The estimated supplemental funds included in the 1952 column are with only one or two minor exceptions, the same as are included in the third supplemental appropriation bill which was reported out in the House last Friday. That supplemental bill carries $13,486,000 for the Department of Agriculture to cover the pay-act adjustment in 1952. There are a couple of minor adjustments we will point out to the clerk that result in a net difference of only $44,000. I don't think we need to bother the members of this committee with it.

Senator RUSSELL. Do I understand that the figures in the first line on table No. 1 include the adjusted pay costs?

Mr. ROBERTS. They do, sir, so that they are comparable with the budget estimates for 1953.

Senator RUSSELL. I observe that they also include some emergency or nonrecurring appropriations—at least we hope they are nonrecurring—for flood relief and things of that kind.

Mr. ROBERTS. Yes, sir. The total of appropriations for the regular programs of the Department, as carried in this bill, is found at the bottom of the first group. For 1952, including the supplemental for pay-act adjustments, the total is $789,735,000. There is proposed for 1953 a total of $752,549,000, a reduction of $37,186,000. That is a net decrease, however. Table 3 indicates what the make-up of it is.

There are decreases in the bill, as is shown on page 2 of table 3, totaling $55,120,000, and increases totaling $17,934,000. Table 2, Mr. Chairman, contains detailed supporting data for table 1. It provides information on a subappropriation basis. Table 3 is a summary of the major increases and decreases proposed in the bill.

Mr. Chairman, I have here a couple of charts which may be of interest to the committee. I don't know that you will want to put them in the record; you may.

The first one (see chart, p. 65) reflects in chart form the totals of the figures shown in table 1, except those for "Special activities," based on the source of the funds or the manner in which the appropriations or authorizations are made available. Loan authorizations for the REA and FHA were $444,000,000 in 1951, $262,000,000 in 1952, and $229,000,000 in 1953.

Permanent appropriations are $186,000,000 in 1952 and $210,000,000 in 1953. The increase results primarily from increased customs receipts under section 32.

The annual appropriations shown are those which I have mentioned in connection with table 1, and are $790,000,000 in 1952 and $753,000,000 in 1953. Of course, those exclude the two special items already mentioned.

The second chart (see chart, p. 66) shows the funds that are made available through these three sources segregated by the general purpose for which they are used.

The loans are self-explanatory and are in the same amounts as shown on the first chart.

The second item, labeled "Conservation aids, surplus removal and sugar programs," represents program payments to producers, to the trade, and so forth, for various purposes other than administrative.

The item for "Payments to States" represents payments to the States for the experiment stations, extension, cooperative fire control, cooperative farm forestry, and the school-lunch program.

The "All other" represents the salaries and expenses not only in connection with the programs that are covered in the other three segments of the chart but all other activities of the Department of Agriculture, including the protection and management of the national forests, forest roads and trails, the marketing service and regulatory activities, the market news service, assistance to soil-conservation districts, animal and plant disease and insect-pest controls, and quarantine, crop reporting, research, and other programs of the Department of Agriculture. There is an increase, you will notice, from $326,000,000 in 1952 to $347,000,000 in 1953 in that block on the chart. That is made up principally——

Senator RUSSELL. Which part of the chart are you referring to?

Mr. ROBERTS. I am explaining the $21,000,000 difference between the $326,000,000 and the $347,000,000 in the 1952 and 1953 columns at the bottom of the chart.

Senator RUSSELL. Yes; I see.

Mr. ROBERTS. Of course, there are other minor adjustments, but the principal ones are these:

Control of forest pests, $2,000,000.

The Forest Service, $2,500,000.

Flood control, $1,000,000.

The Production and Marketing Administration, $14,000,000.

The Soil Conservation Service, $2,000,000 (net).

Senator RUSSELL. What does that item for the Production and Marketing Administration consist of, Mr. Roberts?

Mr. ROBERTS. That is principally two items, Mr. Chairman. The first is an increase for the production goals work of approximately $5,000,000. The second results from a proposal that more of the ACP money be used for assistance by the county and community committeemen to the farmers in selecting practices that will get more

conservation in relation to the need of that particular area than has been the case in the past. It represents an increase in administrative expenses, but does not represent an increase in the total ACP appropriation because, as you will remember, the Congress in the 1952 appropriation act provided an advance authorization for the 1952 program.

Thus the budget contains a proposal for carrying out the 1952 program in the authorized amount, but provides for a shift of about $10,000,000 of what would otherwise be payments money to county association funds that would be used by the county and community committeemen in doing a more intensive job of working with the farmers in selecting practices which would be more desirable for that particular area and for each particular farm, and for an increase in the salaries of county association employees.

Senator RUSSELL. Is the Department satisfied that that $10,000,000 can be deducted without denying any farmer the payments to which he is entitled?

Mr. ROBERTS. Yes. The announced program has been so arranged that there will be no reduction of any commitments made to farmers in connection with the 1952 program.

Senator RUSSELL. Was the appropriation carried in the bill for this fiscal year for conservation practices in the calendar year 1951 adequate to take care of those people?

Mr. ROBERTS. Yes; the appropriation was adequate, sir.

Senator RUSSELL. Was there any surplus left over?

Mr. ROBERTS. There may have been a slight surplus. You see, those payments will not be completely disbursed——

Senator RUSSELL. I understand that.

Mr. ROBERTS (continuing). Until late this year.

Senator RUSSELL. I understand that.

Mr. ROBERTS. I cannot say now what the unobligated balance will be. There will naturally be some small balance because of the wide geographical distribution of the funds. I can say, however, that the appropriation was adequate, and that there will be some small working balance left. I could put some indication of that in the record, Mr. Chairman, but it would be pure speculation at the moment.

Senator RUSSELL. Well, my main concern is as to whether it was adequate.

Mr. ROBERTS. It was adequate; yes, sir.

That is all I have, Mr. Chairman.

Senator RUSSELL. I think these two charts ought to be printed in the record of our hearings. I think they will be very helpful to the members of the committee and to the Members of the Senate in analyzing the bill.

Any comments?

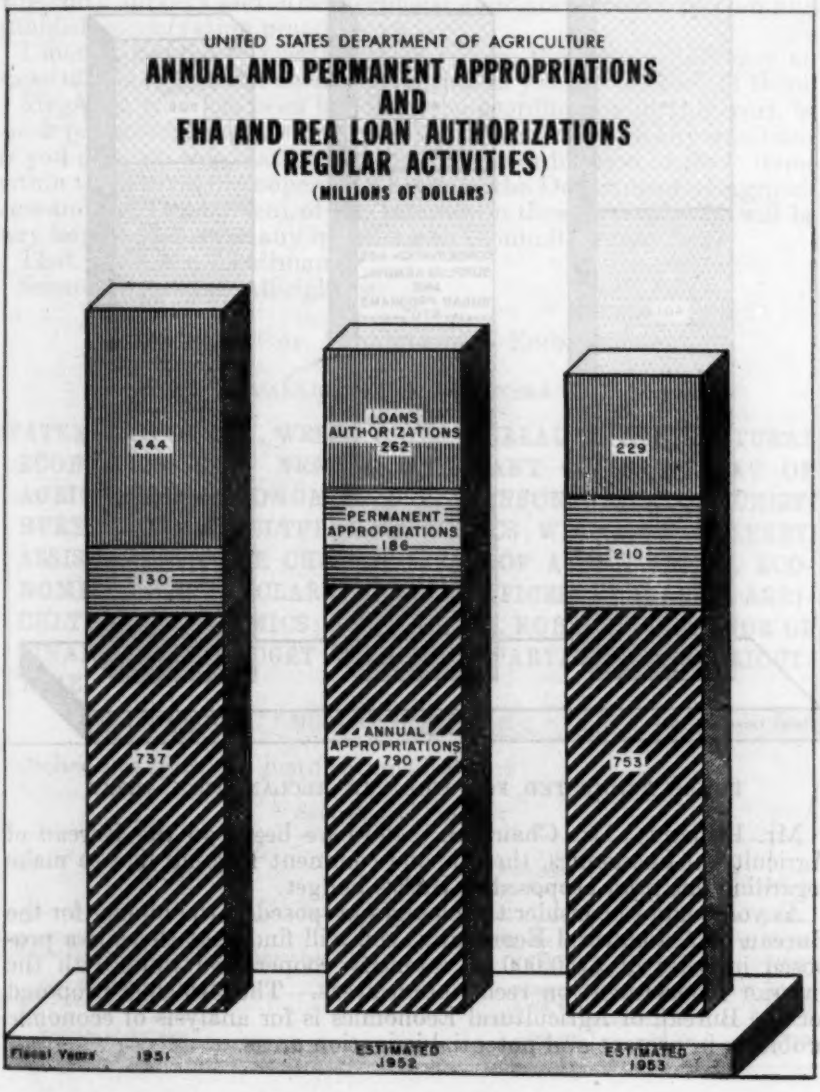
Senator HAYDEN. The only comment I have to make on the charts is that I hope that it is entirely true that equal results can be obtained by more methods using a lesser amount of money.

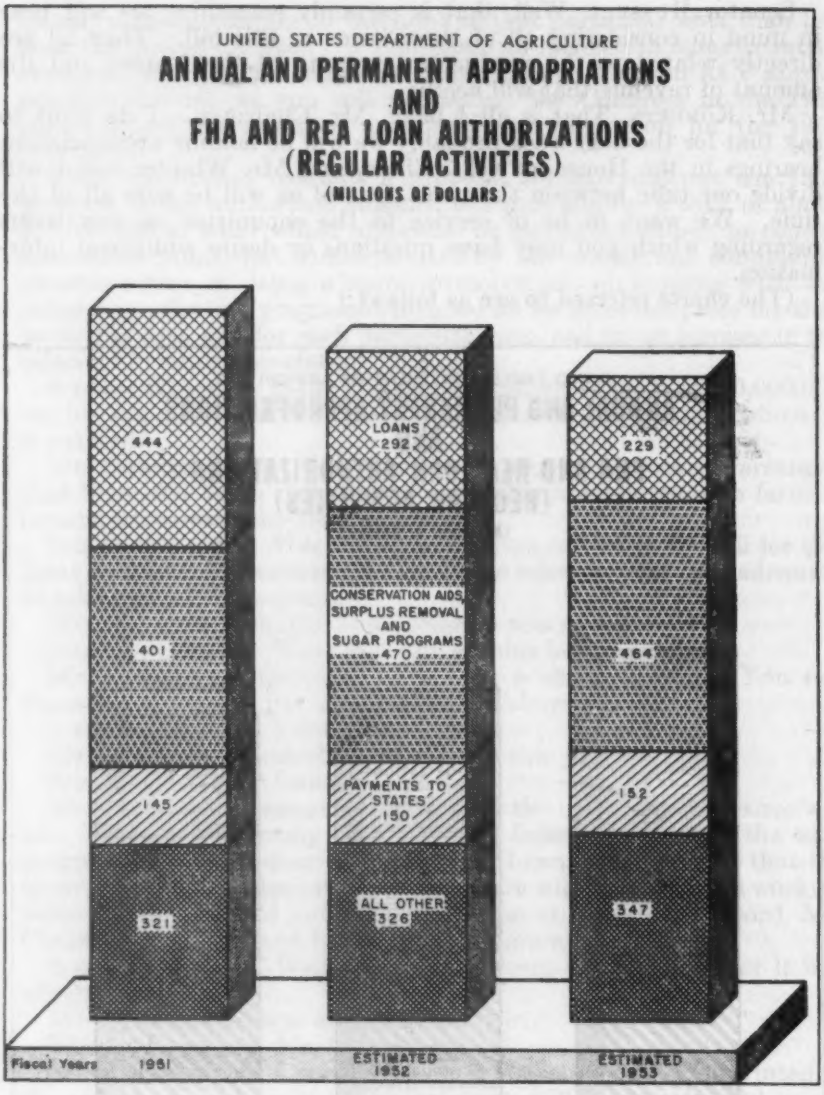
I consider the Department of Agriculture to be a department that has as one of its activities the production of wealth that increases the taxable base in the country; and, where you can demonstrate that, I am not afraid to make appropriations. It is a mistake to take any agency of the Government that is helping the American people to increase their taxable wealth and so hamper it that it cannot give the advice and the assistance that the people ought to have.

Senator RUSSELL. Well, that is certainly something we will bear in mind in considering all of these items in this bill. They all are directly related to the productive capacity of the Nation and the amount of revenue that will accrue.

Mr. ROBERTS. That is all I have, Mr. Chairman. I do want to say that for the next week probably we will be holding appropriation hearings in the House as well as here, and Mr. Wheeler and I will divide our time between the two. One of us will be here all of the time. We want to be of service to the committee on any items regarding which you may have questions or desire additional information.

(The charts referred to are as follows:)






FUNDS REQUESTED FOR WORK IN RECLAMATION AREAS

Mr. ROBERTS. Mr. Chairman, before we begin on the Bureau of Agricultural Economics, there is one comment I would like to make regarding one item proposed in BAE's budget.

As you begin to consider the changes proposed in the budget for the Bureau of Agricultural Economics, you will find that there is a proposed increase of $150,000 to intensify cooperative work with the Interior Department on reclamation areas. The $150,000 proposed for the Bureau of Agricultural Economics is for analysis of economic problems in present and potential irrigation areas.

There are three other related items that I think the committee will wish to keep in mind in considering each one of them because of their relationship to each other. One is a proposed increase of $125,000, also for the same cooperative work on reclamation areas, by the Bureau of Plant Industry, Soils, and Agricultural Engineering, to intensify its work on soil surveys, soil management, irrigation, and salinity investigations on reclamation projects.

Another is in the amount of $130,000 for the Soil Conservation Service to provide for soil and water conservation and engineering investigations.

The third is in the amount of $400,000 and is also for the Soil Conservation Service to provide farmers in reclamation areas with land capability surveys and other technical assistance needed to plan and establish conservation practices.

I merely wanted to mention them now so that you would have an opportunity to consider their relationship as you discuss each of them.

Mr. Will, who has been handling the coordination of this work at the departmental level, is present, and should you have any questions as you get into this matter regarding the coordination of these items within themselves or cooperation between the Department of Agriculture and the Department of the Interior on these activities he will be very happy to answer any questions the committee may have.

That is all, Mr. Chairman.

Senator RUSSELL. All right, sir.

## BUREAU OF AGRICULTURAL ECONOMICS

### SALARIES AND EXPENSES

**STATEMENTS OF O. V. WELLS, CHIEF, BUREAU OF AGRICULTURAL ECONOMICS; S. R. NEWELL, ASSISTANT CHIEF, BUREAU OF AGRICULTURAL ECONOMICS; S. E. JOHNSON, ASSISTANT CHIEF, BUREAU OF AGRICULTURAL ECONOMICS; WILLIAM T. WOLFREY, ASSISTANT TO THE CHIEF, BUREAU OF AGRICULTURAL ECONOMICS; EMILY E. CLARK, BUDGET OFFICER, BUREAU OF AGRICULTURAL ECONOMICS; AND RALPH S. ROBERTS, DIRECTOR OF FINANCE AND BUDGET OFFICER, DEPARTMENT OF AGRICULTURE.**

BUDGET SCHEDULE

(Schedules from the justifications follow:)

*Salaries and expenses*

| | Economic investigations | Crop and livestock estimates | Total |
|---|---|---|---|
| Appropriation Act, 1952 | $2,150,000 | $2,848,304 | $4,998,304 |
| Anticipated pay adjustment supplemental | 173,000 | 236,000 | 409,000 |
| Base for 1953 | 2,323,000 | 3,084,304 | 5,407,304 |
| Budget estimate, 1953 | 2,507,000 | 3,058,000 | 5,565,000 |
| Increase or decrease | +184,000 | −26,304 | +157,696 |

*Summary of increases and decreases, 1953*

| | |
|---|---|
| Economic investigations: | |
| For research on farm costs and returns | +$52,000 |
| For analyses of economic problems of present and potential irrigation areas | +150,000 |
| Decrease due to partial absorption of pay-adjustment costs | −18,000 |
| Crop and livestock estimates: Decrease due to partial absorption of pay-adjustment costs | −26,304 |

*Project statement*

| Project | 1951 | 1952 estimated | Increase or decrease | | 1953 estimated |
|---|---|---|---|---|---|
| | | | Pay adjustment absorption | Other | |
| 1. Economic investigations: | | | | | |
| (a) Economics of production | $1,355,801 | $1,274,000 | −$10,000 | +$202,000 | $1,466,000 |
| (b) Prices, income and marketing | 936,999 | 846,700 | −6,500 | | 840,200 |
| (c) Farm population and manpower | 183,113 | 202,300 | −1,500 | | 200,800 |
| Subtotal | 2,475,913 | 2,323,000 | −18,000 | +202,000 | 2,507,000 |
| 2. Crop and livestock estimates: | | | | | |
| (a) Field crop estimates and reports | 932,603 | 999,904 | −8,704 | | 991,200 |
| (b) Fruit, nut, and vegetable estimates and reports | 402,429 | 431,700 | −3,600 | | 428,100 |
| (c) Livestock and poultry estimates and reports | 538,999 | 577,800 | −4,900 | | 572,900 |
| (d) Dairy estimates and reports | 333,506 | 358,100 | −3,000 | | 355,100 |
| (e) Agricultural price estimates and reports | 566,602 | 611,600 | −5,200 | | 606,400 |
| (f) Farm surveys and employment estimates and reports | 96,934 | 105,200 | −900 | | 104,300 |
| Subtotal | 2,871,073 | 3,084,304 | −26,304 | | 3,058,000 |
| Unobligated balance | 74,314 | | | | |
| Total pay adjustment costs | [ ] | [432,000] | [ ] | [+12,700] | [444,700] |
| Total available or estimate | 5,421,300 | 5,407,304 | −44,304 | +202,000 | 5,565,000 |
| Transfer in 1952 estimates to "Expenses of defense production, Executive Office of the President" | +17,700 | | | | |
| Reduction pursuant to Sec. 1214 | +65,000 | | | | |
| Anticipated pay adjustment supplemental | | −409,000 | | | |
| Total appropriation or estimate | 5,504,000 | 4,998,304 | | | |

## POPULATION TRENDS AND PROPORTION OF NATIONAL INCOME RECEIVED BY THE FARM POPULATION

Senator RUSSELL. The committee will come to order.

Yesterday the committee had under discussion the subject of population trends and the proportion of the national income received by the rural population. I have received a letter from Mr. O. V. Wells, Chief of the Bureau of Agricultural Economics, which contains a statement more clearly defining Mr. Wells' explanation of yesterday for the very decided drop in the farm population in comparing the census of 1940 with that of 1950.

This table will be inserted in the record, together with the letter from Mr. Wells.

(The letter and table referred to follow:)

DEPARTMENT OF AGRICULTURE,
BUREAU OF AGRICULTURAL ECONOMICS,
*Washington, D. C., March 11, 1952.*

Hon. RICHARD B. RUSSELL,
*United States Senate.*

DEAR SENATOR RUSSELL: I am attaching hereto a copy of our most recent revised table showing income to persons on farms as a percentage of national income and farm population as a percentage of total population, 1910–51.

The first column on this table shows net income to persons on farms from farming as a percentage of national income. Since some criticism or question is sometimes raised with respect to this calculation on the grounds that a considerable number of farm people receive income from nonfarm work, the second column on the table shows from 1934 forward net income to persons on farms from all sources as a percentage of national income. The third column shows farm population as a percentage of total population.

You expressed some interest yesterday morning in the fact that farm population today constitutes only about 15 percent of the total. Very briefly, the decline in the percentage of our population accounted for by farm people over the last 10 years or so has been accounted for by three somewhat different factors:

(1) The 1950 Census adopted a new and tighter definition of farm population, excluding from their farm count people living in the open country whose income was solely derived from nonfarm or urban employment. The earlier farm population estimates have been revised to accord with this new definition. The more important factors, however, are:

(2) The steady off-farm drain of farm people over most of the years since 1941 into nonfarm work and the armed services, a drain which has been sharply reemphasized since the Korean outbreak in late June 1950, and

(3) The sharp rise in the birth rate, especially among urban people, in the United States following the outbreak of World War II with a consequent sharp step-up in the natural rate of increase of the urban population.

Sincerely yours,

O. V. WELLS, *Chief.*

*Income to persons on farms as a percentage of national income and farm population as a percentage of total population, 1910–51*

| Year | Net income to persons on farms from farming as a percentage of national income [1] | Total net income to persons on farms as a percentage of national income [1 2] | Farm population as a percentage of total population | Year | Net income to persons on farms from farming as a percentage of national income [1] | Total net income to persons on farms as a percentage of national income [1 2] | Farm population as a percentage of total population |
|---|---|---|---|---|---|---|---|
| | *Percent* | *Percent* | *Percent* | | *Percen* | *Percent* | *Percent* |
| 1910 | 13.7 | | 34.9 | 1931 | 6.3 | | 24. |
| 1911 | 11.4 | | 34.3 | 1932 | 5.5 | | 24.3 |
| 1912 | 13.7 | | 33.9 | 1933 | 6.9 | | 24.9 |
| 1913 | 10.9 | | 33.4 | 1934 | 6.0 | 9.3 | 24.6 |
| 1914 | 12.4 | | 32.8 | 1935 | 9.8 | 13.0 | 24.3 |
| 1915 | 11.9 | | 32.4 | 1936 | 7.1 | 10.1 | 23.8 |
| 1916 | 10.9 | | 32.0 | 1937 | 8.8 | 11.9 | 23.2 |
| 1917 | 16.5 | | 31.3 | 1938 | 7.6 | 10.6 | 22.8 |
| 1918 | 16.4 | | 30.3 | 1939 | 7.0 | 10.1 | 22.5 |
| 1919 | 15.0 | | 29.2 | 1940 | 6.8 | 9.7 | 22.0 |
| 1920 | 11.8 | | 29.7 | 1941 | 7.8 | 10.6 | 21.6 |
| 1921 | 6.8 | | 29.3 | 1942 | 9.1 | 11.8 | 20.7 |
| 1922 | 8.0 | | 28.8 | 1943 | 8.5 | 11.0 | 18.9 |
| 1923 | 8.1 | | 27.7 | 1944 | 8.0 | 10.4 | 17.9 |
| 1924 | 7.8 | | 26.9 | 1945 | 8.2 | 10.6 | 17.4 |
| 1925 | 9.6 | | 26.4 | 1946 | 9.4 | 11.8 | 18.1 |
| 1926 | 8.3 | | 25.8 | 1947 | 9.2 | 11.5 | 18.2 |
| 1927 | 8.2 | | 25.0 | 1948 | 9.3 | 11.5 | 17.2 |
| 1928 | 8.2 | | 24.6 | 1949 | 7.3 | 9.6 | 16.9 |
| 1929 | 8.0 | | 24.3 | 1950 | 7.1 | 9.2 | 16.1 |
| 1930 | 6.6 | | 24.0 | 1951 [3] | 7.6 | 9.6 | 15.1 |

[1] Includes Government payments to farmers 1933–48.
[2] Net income from all sources, including both farm and nonfarm earnings, to persons on farms.
[3] Preliminary.

### BUDGET REDUCTION

Senator RUSSELL. Dr. Wells, you may proceed.

Mr. WELLS. Mr. Chairman and gentlemen: The budget before you makes provision for the Bureau of Agricultural Economics to carry on the crop and livestock estimating service at a slight reduction from this year, after adding the amount necessary to cover the costs of the recent pay increases. The actual reduction, gentlemen, I think is $26,304. It provides for continuation of most of our work in the field of economic investigations and carries two increase items: $52,000 for increased research on farm costs and returns, and $150,000 for analysis of economic problems in areas which are now or may in the future be irrigated.

### THE DEFENSE SITUATION

A year ago we were confronted with some extraordinary and difficult problems due to the existing international tension and the building up of the Nation's defense effort. At that time I outlined the job which I thought lay before the Bureau of Agricultural Economics as we moved into fiscal 1952. I said that we would try to maintain our basic statistics and related services inasmuch as these appeared essential to the defense effort; that we would review and shift our research work in line with defense needs; and that in cases where it appeared that lines of work should be reduced or closed out we should at least properly record what had been done.

Meanwhile, we still find ourselves in a period of international tension, and it is apparent that large expenditures for defense will continue for some time. It is also apparent that the difficult problems relate not only to maintaining or increasing farm production but also to farm prices and the marketing and distribution of farm commodities or the products thereof.

### ADDITIONAL BASIC DATA NEEDED

If the Bureau of Agricultural Economics is to carry forward successfully the functions which are assigned to it, we need to maintain and further strengthen our basic economic data, but it is not enough to merely maintain our statistical series and service work. We are constantly confronted with new problems, calling for original analysis and research. In the production field, for example, some of the questions now current are: How much and what kinds of production can be obtained in different areas in line with national needs? Under what conditions will scarce fertilizer and other resources contribute most to farm output? Will it be profitable for farmers to carry out the suggested changes? And how are current increases in production or production capacity likely to fit into the longer-run situation?

As you know, in 1951 our total farm output was almost 40 percent above the average of 1935–39. But farmers used only a little more land and some 13 percent less labor. This reflects remarkable strides in production efficiency. Output per acre in 1951 was 28 percent higher, output per animal 20 percent higher, and output per man about 60 percent higher than prewar. Agricultural research has pointed the way to these accomplishments. But to a large extent the new ways of farming substitute other resources for land and labor. Compared with prewar, farmers are using 70 percent more farm power

and machinery, over three times as much fertilizer, and much more motor fuel, pesticides, improved seed, and other production goods that are bought in the market instead of being produced on the farm.

Senator HAYDEN. Let me ask this question: I have heard that there has been a certain amount of increase in crop production due to what we call spray irrigation in the rainfall regions. Is that a wide practice or not?

Mr. WELLS. Well, Senator Hayden, as compared with the total amount of land under farming, the answer is "No;" but it is something which is being increasingly adopted or used in many areas. That is, sprinkler irrigation.

Irrigation is now moving into the East and Midwest into areas which we formerly thought of as having very adequate rainfall.

Senator HAYDEN. It is particularly applicable to areas where you may have a series of wet years and a series of dry years. In the dry years it would be a stand-by making it possible to finish out the crop.

Mr. WELLS. That is true.

Senator HAYDEN. It is an expanding program then, as far as the use of spray irrigation is concerned by farmers?

Mr. WELLS. Yes, and also the use of deep wells all over the United States is increasing.

Higher output per man, per acre, and per animal, has meant increasing cash costs on the farm. We estimate farm cash or out-of-pocket production expenses for 1951 at 22.5 billion dollars, practically three times the 7.66 billion dollars estimated for 1941. Cash expenses of marketing have risen, too, partly as a result of higher wages and freight rates, and also due to additional processing, packaging, and other services. Food marketing charges for 1951, for example, apparently ran 2⅓ times those prevailing in 1941. Higher costs make farmers increasingly vulnerable in the case of poor crops or unfavorable prices. Further, it means that farm returns must be adequate to enable farmers to achieve the high level of agricultural production that is our goal.

Research has released an entirely new technology and set of production and marketing practices. But the new methods are more complex and require far larger cash outlays than the older methods. In the interests of the American farmer and the public, the Department must constantly seek answers to the twin questions: Will it work? And, will it pay?

## FARM PRODUCTION CAPACITY STUDY

In accordance with arrangements made by the Secretary of Agriculture with the Association of Land-Grant Colleges and Universities, the Bureau assumed leadership of a study of agriculture's productive capacity, starting last summer.

This study is in cooperation with other departmental agencies and with the 48 State experiment stations under the leadership of our regular research personnel. The first part of the study was directed to obtaining a series of estimates of what acreages and livestock numbers might be possible in 1952. The results are being used extensively both in the Department and in the States in the development of the 1952 production program.

The main part of the Nation-wide analysis, which is still in progress, endeavors to estimate the levels of production that can be attained over the next several years centering around 1955. Most of the work in the States has been completed and State reports are now being summarized. This will provide information basic to the development of agricultural programs, not only in determining what American farmers and the American farm plant can produce but also in assisting in the determination of agriculture's needs for various scarce materials such as fertilizer, insecticides, and so forth, and for labor.

Senator ELLENDER (presiding). Mr. Wells, was not this study started last year or the year before?

Mr. WELLS. We did some of this work during the last World War, Senator Ellender, and then discontinued it with the discontinuance of production goals. But last summer, as a part of the defense program and in an effort to find out not what farmers should produce but what they could if prices and conditions made it worth while, the Secretary asked that the Bureau of Agricultural Economics with the cooperation of the land-grant colleges and universities go into this type of study.

Senator ELLENDER. There was another type of study to get opinions from the grass roots as to how to improve the present methods.

Mr. WELLS. You are talking about the farm family policy review?

Senator ELLENDER. Yes. Is not that a part of the whole study?

Mr. WELLS. No. That is a review of agricultural policy, Senator Ellender; and the policy-making function centers in the Office of the Secretary. The farm capacity study is a fact-finding project which aims to bring together the work that the scientists and the farm management people do in order to estimate, if prices and conditions make it desirable, what the production capacity of American agriculture during the defense period is.

The two projects are quite separate and are handled entirely separately. One is under the immediate direction of the Secretary's office. The other is under the direction of the Bureau of Agricultural Economics. There is no relation between the two necessarily.

Preliminary tabulations indicate that, although possibilities of expanding crop acreage on a sustained basis are rather limited, it would be feasible to increase production substantially by further adoption of improved crop and livestock practices, provided the necessary production requisites are forthcoming, and provided farm prices are such as to allow farm returns to be maintained at a profitable level.

### DEFENSE EFFORT

We have also made other shifts in the Bureau program in order to further the defense effort. We are providing much of the basic data and many of the analyses used by the Department and other agencies not only in appraising the Nation's needs for farm products, but also in determining what American farmers need to produce these products. Our commodity analysts and statisticians are serving on the supply estimates committees which keep the various commodity situations under constant review in the Department. Our State statisticians are assisting State mobilization committees whenever and wherever their statistical materials and know-how can be of help.

We are giving first priority to defense work. However, we still face the problem of maintaining the statistical work of the Bureau as well as research on problems in production, marketing, and farm manpower. The Bureau's ability to assist in the defense effort depends upon its ability to find and interpret facts. This is our job.

SOURCE OF BASIC STATISTICS

As you know, practically all of the funds carried under the "Crop and livestock estimates" subappropriation are used to develop basic statistical materials. But a great deal of basic statistical material also flows out of the work under the "Economic investigations" subappropriation.

As best we can estimate it, about 25 percent of the funds carried under "Economic investigations" are used directly to produce basic statistics, such as our estimates of over-all agricultural output, food consumption, land values, debts, farm income, and farm expenditures. About 25 percent of the funds carried under this sub-appropriation go into service work—that is, in answering the innumerable requests or questions which come to us from many sources, including the Congress.

Only about 50 percent of the funds available under the "Economic investigations" subappropriation are used for what we would ordinarily think of as research, and this includes a considerable amount of service research in connection with our outlook and situation work as well as such semiservice tasks as the production capacity project. This work also provides statistics which are essential to estimating the effects of various programs, activities, and proposals upon farm people, even though the results may not be compiled into the form of regularly released, continuing statistical series.

Our farm management and land-use facts, if they are to be accurate and trustworthy, must come in large part from the farmers themselves. We need an adequate field staff even though the usefulness and knowledge of our fieldmen are multiplied many times over by our cooperative working relations with the State experiment stations.

REDUCTION IN ECONOMIC INVESTIGATIONS WORK

The funds available for work under the "Economic investigations" subappropriation were reduced 15 percent for the current fiscal year as compared with the previous year. We have tried to minimize the effects of this reduction. But it has been necessary to curtail or discontinue a number of projects, to reduce some of our service activities, and to temporarily curtail some of our management improvement work. Altogether, we have either discontinued or are not carrying forward over 20 studies which we would otherwise have under way. We have reduced the number and volume of our commodity and other situation reports by about 20 percent, and throughout the Bureau we have found it necessary to slow down or curtail the amount of effort devoted to the work which is being continued.

Senator ELLENDER. When you say that the appropriation for economic investigations was reduced 15 percent, do you mean by the Budget Bureau?

Mr. WELLS. The appropriation for economic investigations last year, Senator Ellender, was 15 percent less than the previous year.

Senator ELLENDER. Yes. What about the situation for this year?

Mr. WELLS. For this year the recommended appropriation is practically the same as for last year plus two items for increased work. In other words, the President's budget for the coming year is about 99 percent of our current appropriation for the same work.

Senator ELLENDER. Then the 15 percent that you lost last year is not being restored?

Mr. WELLS. No; that is right. I am pointing out here that we have had to slow down and to cut down on a considerable amount of the work. The reason I am doing that, Senator Ellender, is because we have been criticized recently in connection with several research studies where the field work was done 1 or 2 years ago and where we have only now been able to finish that work and release the results. The first thing was the defense job and we then published the results of the research work when we could.

Senator HAYDEN. Was that 15 percent cut due to a blanket percentage cut imposed by Congress?

Mr. WELLS. Not altogether, Senator Hayden. The appropriation for economic investigations was cut, if I remember correctly, by the House Appropriation Committee and again on the House floor, altogether by about 26 percent. The Senate restored a substantial sum, and the conference committee finally agreed on a 15 percent net reduction.

Senator HAYDEN. I still feel that it is not fair to do that.

Mr. WELLS. There has been some criticism of the Bureau due to the fact that certain research results have been released quite a while after the field research work was done. That was brought about by the need to rearrange personnel and move the work along as smoothly as we could.

Senator ELLENDER. You say that the Budget Bureau has allowed you 99 percent of what you had last year. Do you mean this fiscal year?

Mr. WELLS. They have asked us to absorb about a 1-percent additional pay-cost offset during the coming fiscal year. I will come later to the fact that they have also included two specific increases in the field of economic investigations.

Senator ELLENDER. That is in connection with what you are discussing then?

Mr. WELLS. Yes; but, if we are not given the money for the increases, we will not be able to do the work.

Senator ELLENDER. With these increases for two projects, you are not going to have restored to you the cut that was made during this fiscal year of 15 percent?

Mr. WELLS. No. The increase for these two projects will not take us back to where we were before.

Senator ELLENDER. Well, to what extent will it take you back?

Mr. WELLS. About halfway.

Senator ELLENDER. So, you are losing about 7½ percent?

Mr. WELLS. Yes, sir. On the other hand, the increase also carries specific work with it.

Senator ELLENDER. I understand.

MANAGEMENT IMPROVEMENT

Mr. WELLS. May I say a word about management improvement. We started in 1950 a study of the management problems in crop and livestock estimates which is now yielding some good results.

During the current fiscal year we have started a survey of management problems relating to research. However, progress has not been as rapid as we should like, chiefly because the work has so far had to be carried almost wholly by people who are already carrying a regular full-time assignment. All of our work has now been covered by the uniform project system, and some of the problems we have been working on recently have to do with the question of progress reports and checks under this project system. We have also studied ways in which the Bureau might work most effectively with the various advisory committees established under the Research and Marketing Act.

CROP AND LIVESTOCK ESTIMATES

With respect to crop and livestock estimates, we are aware of some criticism due to the fact that production estimates for various crops were reduced during the 1951 growing season. However, I feel these criticisms are for the most part based on a misunderstanding of what the crop estimates or forecasts represent and the manner in which they are developed.

As the Secretary of Agriculture indicated, the backbone of the Crop Reporting Service is the corps of voluntary crop correspondents. Several hundred thousand farmers each year return one or more schedules relating to acreage, condition of crops, numbers of livestock, or similar items. The information which these farmers supply, loyally and voluntarily, is the raw material from which our State and National estimates are built. The reports are assembled through our State statisticians' offices and then sent to Washington for review and combination into a national report by the Crop Reporting Board.

The State statisticians, as well as the Crop Reporting Board, use all the check data which they are able to find or develop, but the fact remains that our early estimates of crop acreage are estimates and that our indications of crop yields during the season are forecasts based on the specific assumption that average weather will prevail from the day of each forecast until the end of the harvesting season.

Over the years these estimates and forecasts have proved extremely valuable to farmers, and you are well aware of our belief that the crop-reporting system is an efficient and economical one, that no other agency turns out so large a volume of work on an equal budget. This is not saying that the crop-reporting system is perfect or that improvements cannot be made. We stand ready to answer questions or explain crop reporting and estimating methods at any time; and, wherever possible, we certainly want to see our estimating procedures improved.

Meanwhile, we are also often asked to provide services on additional crops and livestock, to speed up the releases of the present reports, and to issue midmonth reports on some of the major crops. Mr. S. R. Newell, Assistant Chief for Agricultural Estimates and Chairman of the Crop Reporting Board, is with me and he will of

course be glad to discuss the Crop Reporting Service or any questions which you may care to ask regarding the subappropriation in detail.

Senator HAYDEN. With regard to your predictions of crops to come, can you boast, as does Drew Pearson, that you are 85 percent right?

Mr. WELLS. I don't know that we can do that, Senator Hayden. I think that we prefer to say that, on the average, our August estimate of the cotton crop would be within 1,000,000 bales of the final estimate.

Senator HAYDEN. There is another great authority, David Lawrence, of the United States News, who predicts every week what Congress is going to do, and so on. Are you anywhere near as accurate as he is? I will say that I find that a lot of his predictions and those of Mr. Pearson do not come true.

Senator ELLENDER. You certainly cannot predict what an area will produce. However, an area will produce more if they will use more fertilizer. Your studies will certainly show the increase.

I know that I could have told you in my own case back home in 1937, when I really got into the potato business—I could have told you from year to year, from the experiments that I carried on, that there would be an increase. You have facts and figures from all over the country, and you can certainly show what increased use of fertilizer and better farming and things like that will bring about in the way of greater production.

Mr. WELLS. If farmers will use them.

Senator ELLENDER. That is right.

Mr. WELLS. Our Crop Reporting Service starts, you see, on the first of the month with a report from several thousand farmers, depending on the particular crop, telling what they expect to produce. That is one estimate we build up from the grass roots as to what will actually be done and what the crop prospects are.

Senator ELLENDER. I have in mind the ability of the land to produce in the future. You are planning now for years to come, what the land may produce in 1955 or in 1956.

Mr. WELLS. That assumes average weather conditions.

Senator ELLENDER. You are basing your assumptions on the utilization of more fertilizer, the use of better machinery, and the expectation that the land will be better worked, are you not?

Mr. WELLS. Yes. We are saying that we think this can be done if the fertilizer and the machinery are provided, if labor is available, and if the prices are right.

Senator ELLENDER. Certainly. In other words, you have set a goal under certain conditions, and you will be 95 percent correct if all that comes to pass.

Mr. WELLS. That is right. Now, when we come to crop estimates, however, we do start making estimates of what is going to happen and we have to assume average weather.

Senator ELLENDER. You have to base your estimates on the facts as you find them.

Mr. WELLS. And I might say that weather conditions last year were not average. Last year was very different.

Senator ELLENDER. I understand.

INCREASES REQUESTED FOR FARM PRODUCTION AND COSTS INVESTIGATIONS

Mr. WELLS. I should now like to turn to the two specific increases which are included in the President's budget. I have already said enough with respect to the kind of problems farmers face to indicate why we feel that increased emphasis needs to be placed on our work relating to farm costs and returns. Since farm production takes place on well over 5 million farms, we need to know whether or under what conditions it will be profitable for farmers to produce the products that are needed, and this is true both in peace and in war. This involves questions of costs and returns to farmers on various types and sizes of farms in different farming areas.

Senator ELLENDER. Mr. Wells, did you do any work of this kind before that was dispensed with because of the lack of funds?

Mr. WELLS. We have been doing some work of this kind. But there has been a series of appropriation cuts in the last several years, Senator Ellender, which have forced us to reduce practically everything.

Senator ELLENDER. May we assume that on these two problems you have not had to stop your work altogether because of the cuts, but you are asking for more money to carry them on on a larger scale?

Mr. WELLS. That is right. We have the authority, and if we had the funds we could go ahead. It is a question of more money with which to do the work which is a part of our regular function.

Our resources for collecting statistics on costs and returns and other important data for some of the principal types of farms are limited and have been reduced during recent years. Currently we are keeping information on farm organization, costs and returns up to date for 16 major types of farming and 8 other series are in varying stages of preparation. Additional series are needed to reflect changes in the important farming areas that are not now covered, while estimates in our present series need to be analyzed more fully and more promptly. The requested increase of $52,000 for work on farm costs and returns will allow several additional studies to be started during the coming fiscal year, as well as assist in keeping our other estimates current.

Additional studies are contemplated for the following areas and situations: (1) Delta cotton plantations, (2) coastal plains cotton-peanut farms of Georgia and Alabama, (3) irrigated cotton farms, (4) Southwestern cattle ranches, (5) fruit and truck farms, and (6) general farms, especially in western irrigated areas. This work is carried out in cooperation with the various State agricultural experiment stations.

Let me say that we have been trying over the years to develop a series of what we call cost and return studies which show for some of the major types of farms in particular geographical areas what the organization of the good, going commercial farm is. In other words, we start with the census record and throw out all of the very large farms and all of the very small, part-time farms, and arrive at an average farm which represents the bulk of the commercial, family-size farms. In that area then we try from year to year to determine the amount of fertilizer, the amount of feed, and the amount of labor that the average farmer buys or hires and the kinds of products which he turns out.

Senator ELLENDER. You mean for the same farmers?

Mr. WELLS. Yes, and also the prices which they receive for the same kinds of crops.

Now, when you ask us about the cost problem for cotton, to give an average cost of producing cotton to me means very little, even if it could be done. You want to know what the problems are that the farmers in the southeastern area face, what are the problems that the farmers in the Mississippi Delta face, and so forth. We have a small-farm Mississippi Delta series already. We propose to add a plantation series. We have several cotton series. We also want to add a western irrigated-cotton series which will more or less give us a good cross section of the bulk of commercial farms in the Cotton Belt.

We try to do the same thing for the dairy farms, and we would like to do the same thing for the livestock farms.

Senator ELLENDER. Do you get cooperation from the farmers that you contact?

Mr. WELLS. We work with the land-grant colleges and universities and use the results of their research.

Senator ELLENDER. I am talking about these particular studies that you say you are going to make of particular farms.

Mr. WELLS. Well, these studies are more statistical than they are studies dealing with particular farms, Senator Ellender. We do carry on with the State colleges a series of farm management studies where we work with particular farms. Now, the great bulk of that, however, is done by the State college and university personnel, but we do try to keep in every State one or two research men working in the field of farm management. This project tries to bring together for some of the main-type areas the results of their studies with individual farmers in an effort to develop an illustrative farm which we can use to reason about what changing prices and other conditions are going to lead into. If that is going to be done directly, we have to have 60 or 70 such series for the United States eventually, and this allows us to make a major start on that project.

We find the material very useful in answering questions which are coming to us all of the time such as: "How are farm costs changing?"

From our over-all income and cost estimates, we know that last year beef producers did very well. We know that part of the Corn Belt did very well, and we know that in the soft-corn area they did very badly.

These studies help. It is the kind of work which is absolutely essential if we are going to analyze intelligently many of the things in which the Congress and the Department is vitally interested.

The budget also includes an increase of $150,000 for the analysis of economic problems in present and potential irrigation areas. This request covers the economic portion of a Department-wide program relating to work on irrigation problems which has been developed in consultation with the Department of the Interior and the Bureau of the Budget.

Senator HAYDEN. There was some time ago information that there was not proper cooperation between the Bureau of Reclamation and the Department of Agriculture. That information indicated that the Bureau of Reclamation was running their own show, so to speak, making their own soil surveys, making their own crop estimates, and doing all of these kinds of things. I hope that what you are talking about

here will fully correct that so that there will be placed in the hands of the Reclamation Service the information which I believe the Department of Agriculture is much more capable of producing.

Mr. WELLS. Well, Senator Hayden, as Mr. Roberts said in his opening statement, I want to make clear to you that that is a part of the Department-wide program in which the Bureau of Agricultural Economics has been asked to cooperate.

We feel that if we are going to develop the West and irrigation in the West and part of the Midwest, a rather careful analysis has to be made of what size and kind of farms are most likely to be successful and how much the farmers can afford to pay for their land and water.

Now, I am not arguing about the other phases of multiple-purpose projects. My Bureau is going to go into the question of what is the outlook for the agricultural portions of the development. The final decisions, of course, are for the Department of the Interior and the Congress.

Senator HAYDEN. But they cannot arrive at a proper decision in the Department of the Interior unless they have adequate facts.

Mr. WELLS. I feel that way myself, and, as I say, this is a program on which the Interior Department and Agriculture Department have worked cooperatively at the level of the offices of the two Secretaries.

Senator HAYDEN. That is the way I want to see it work.

Mr. WELLS. And with the approval of the Bureau of the Budget.

Senator ELLENDER. I understand that we have with us Mr. Will, who deals with this matter of irrigation of Bureau of Reclamation lands.

Mr. ROBERTS. Mr. Chairman, Mr. Will is a member of the Secretary's office who has the departmental responsibility for the coordination of this work within the Department, and for working cooperatively with the Interior Department.

Senator ELLENDER. Is there any duplication there?

Mr. ROBERTS. No. This is an attempt to avoid duplication, Senator Ellender. It is an attempt to have the agricultural work in connection with the Reclamation projects conducted by the Agriculture Department where we have the competence, the scientists and so forth to do the work, rather than have the Interior Department set up a comparable staff there to do it.

Senator ELLENDER. To what extent does the Department of Interior cooperate with you on such problems?

Mr. ROBERTS. I would prefer to refer that question to Mr. Will.

Senator ELLENDER. Mr. Will, will you give your full name for the record.

## STATEMENT OF RALPH R. WILL, OFFICE OF THE SECRETARY, DEPARTMENT OF AGRICULTURE

### COORDINATION OF LAND AND WATER RESOURCES PROGRAMS

Mr. WILL. I am Ralph R. Will of the Office of the Secretary, working on coordination efforts on land and water resources programs of the Department. In that capacity, we deal with the Department of the Interior and the Bureau of Reclamation on matters such as you have before you here today.

On the question that Senator Hayden raised, that is, the question of working relationships, cooperative relationships between the two

Departments, I want to report to you that much progress is being made. What I am saying now was corroborated and confirmed by the Department of Interior representatives at the House hearings on these same items.

At that time they told the House committee that they did not wish to undertake activities in the realm of agriculture having a bearing on Reclamation projects that the Department of Agriculture could better handle. Now, pursuant to that understanding with the Department of the Interior, within the past 12 or 18 months we have secured from the Department of the Interior data and information which expressed their opinion as to the need for the Department of Agriculture's activities in connection with their projects.

We have taken that information and sifted it down and identified what appeared to be the more critical and necessary items needing immediate attention. On the basis of that kind of information and judgments, we have proposed certain increases which Mr. Roberts and Mr. Wells are mentioning to you here today.

Mr. WELLS. That also includes the Bureau of Plant Industry and the Soil Conservation Service.

Senator ELLENDER. As I understand from Mr. Will's statement, the Department of the Interior is engaged in work similar to this and there is a greater degree of cooperation. Now, what do you mean by a greater degree of cooperation? Do you mean that you are near getting together on seeing eye to eye, and all of that?

Mr. WILL. I will put it this way, Senator: We do understand that the Department of the Interior, particularly in the Missouri Basin and perhaps in some other areas, has been using general basin investigation funds available to them to engage in some kinds of agricultural work, both physical and economic. They have done that, I think, as a means of supplementing work that we are doing to take care of immediate problems chiefly because, in the past, our Department has not been able to adequately keep up with the requirements. Recently they have increasingly thrown the ball to us and have said, in fact, that we should do that kind of work, and that if we equip ourselves to do it they would rather get out of that field entirely. They have made statements of that kind to the House committee. They appear in the record of those hearings.

Senator HAYDEN. It is my recollection, Mr. Chairman, that in the past 10 years much more than a million acres of land have been brought under irrigation. Now, there must be proper planning in that regard. For example, if you do not have an accurate soil survey, you can lay out alkaline land for irrigation that ought not to be included.

In most areas there is a choice of land. There is more land available than there is water for irrigation purposes. Now, if the land is properly classified by the Department of Agriculture, you can apply the water to the right places. Then you come down to the various irrigation practices which make a lot of difference. That includes advising the new settler when he goes on the land what he can grow and what the best way to grow that is. Based on the experience of the Department of Agriculture in other irrigated areas, they can tell him much better than the Department of the Interior can.

So if they can properly coordinate, you are not only going to save money by preventing the duplication of work, but also you are going to have the farmer on the land started off on a much better basis.

Senator ELLENDER. You will get better results.

Senator HAYDEN. Yes.

Senator ELLENDER. All right, Mr. Will.

Mr. WILL. Thank you, Mr. Chairman.

Senator ELLENDER. Will you go ahead, Mr. Wells.

Mr. WELLS. I have asked our Assistant Chief for Production Economics, Mr. Sherman E. Johnson, under whose direction this work would chiefly fall, to prepare a supplementary statement relating to the kind of questions which we think should be answered and the methods which would be used. We should be glad either to present this statement or, should you so desire, file it with the committee. I have a one-page summary of that statement which I can submit, and then you can decide about the longer statement.

Mr. Ralph Will of the Secretary's office is also here, and I am sure that either Mr. Johnson or Mr. Will will be glad to answer any questions which the committee may want to ask with respect to the importance of irrigation problems and the need for this work.

### FARM STUDIES IN IRRIGATION AREAS

Summarizing very briefly: The various irrigation areas in which such studies would be made would be selected in consultation with the Bureau of Reclamation and the State experiment stations. Attention would be given to such questions as:

What sizes and types of farms will pay best under the conditions that are likely to prevail in the area? What are the possibilities for combining irrigation farming with the use of surrounding dry land and range? How much will farmers have to invest in order to develop the best paying types and sizes of farms? What kinds of credit arrangements will be needed to get started on such farms, to develop them, and to carry on the year-by-year operations? What effect will the rate of farm development have on investments and on resulting incomes? If profitable farming systems are developed, how much will farmers have available, after providing for farm operating and family living expenses, to pay for water development, including construction and maintenance charges?

In addition to these problems which will have to be studied in specific areas, we shall of course have to do some special work relating to price and market prospects for the products of the irrigated areas in order to arrive at some reasonable conclusion as to what prospective incomes may be.

Mr. Chairman, this concludes my prepared statement. If you or any members of the committee have any questions about these items or any of the work of the Bureau, I shall be happy to try to provide you with whatever information you may need.

Senator HAYDEN. Mr. Chairman, my attention has just been directed—and I think this is an entirely appropriate place in the record—to a statement by Mr. Eaton of the Bureau of Reclamation before the House committee in which he said the following:

In support of Mr. Will's statements, I would like to indicate that the Bureau of Reclamation is not primarily an agricultural agency. We prefer to look to the agricultural agencies of the Federal departments and the State colleges as our experts in matters of soil management, crops, fertilizers, and things of that sort, which are needed to bring the lands delivered water through works constructed

by Reclamation into their highest beneficial use. . Also in matters of farm management, marketing arrangements, and all of the economic aspects of things which Reclamation farmers need to work with in order to make their farms successful, we regard as being outside of our primary field.

I am very happy to see this spirit of cooperation.

Senator ELLENDER. So am I, and I am very hopeful that this policy will be pursued and that there will not be under the Department of the Interior anything connected with agriculture—that is work that is now being done by the Department of Agriculture and which is duplication of the highest degree, in my opinion.

Senator HAYDEN. That we should avoid, if possible.

BUDGET ESTIMATE FOR AGRICULTURAL ECONOMICS

Senator ELLENDER. Mr. Wells, going to your justification, I notice that the total amount that is being asked for the Bureau of Agricultural Economics is $5,565,000 and that you received last year $5,407,304. That is correct; is it not?

Mr. WELLS. Yes, sir.

Senator ELLENDER. Will you tell us how much of that amount is due to pay adjustments? In other words, you have an increase there in round figures of about $157,000. How much of that is attributable to pay increases, adjustments in pay?

Miss CLARK. The increase of $157,696 for the coming year is a net increase. For the current year we are expecting to get about $409,000 for pay-act costs for the whole appropriation.

Mr. WELLS. Let me say it this way: This year, Mr. Chairman, there is now before the House an estimate of about $409,000 for pay-act costs, and that is included in the figures you have just given us.

For next year we have a net increase of $157,000, almost $158,000, and you get that by allowing $52,000 for farm costs and $150,000 for irrigation, then subtracting the $44,000 of pay-act cost absorption.

Senator ELLENDER. Why is that not included in the total I have just read?

Mr. WELLS. The Bureau of the Budget has asked us to absorb about $44,000 worth of additional pay costs next year. In other words, the appropriation to cover the pay-increase act will be passed so late this year that the Bureau of the Budget did not ask us to absorb much this year, but next year we are being asked to absorb another $44,000.

Senator ELLENDER. Now, the total amount appropriated last year was $5,407,304.

Mr. WELLS. Including the $409,000 pay-cost supplement which the House committee reported out.

Senator ELLENDER. In addition to that, you have this extra $157,000 approximately. Now, you say that you are being asked to absorb this pay increase in this current year only?

Miss CLARK. No. The absorption is in the coming year. For the current year we are getting almost all of the cost of our pay-act increases. We are getting practically all of it if the bill passes as reported by the House committee.

Senator ELLENDER. Are you going to absorb then during the next fiscal year out of the total you are now asking for? There will not be any extra for that?

Miss CLARK. No. We have to absorb $44,300 next year.

Senator ELLENDER. Is the $157,000 that you have asked for in your statement, Mr. Wells, included in this $5,565,000?

Mr. WELLS. Yes; that is included. This year we have $5,407,304. The estimate for 1953 is $5,565,000, which includes a net increase of $157,696. May I say that the pay-cost absorption next year, although it seems small, will create a real problem, especially in our crop and livestock estimates work.

Senator ELLENDER. I appreciate that. I want us to make a record which will show the necessity for it. If it were left up to those of us who are familiar with the problems and to those of us who are on the Committee on Agriculture, there would not be any questions asked; but this record must be made for members who are not on this Appropriations Committee and who are not on the Agriculture Committee.

Now, is there anything else you desire to add, Mr. Wells, to what you have previously stated?

Mr. WELLS. I would like to make one brief statement off the record, if I might.

Senator ELLENDER. Before you do that, I notice that in your statement you ask whether or not we want to receive statements from two sources.

Mr. WELLS. Mr. Johnson has a supplementary statement going into the irrigation problem in detail. If you care to hear it, he will be glad to read it.

Senator ELLENDER. Will you put it in the record?

Mr. WELLS. We will be glad to place it in the record. With that, I think the record will be complete.

Senator ELLENDER. Is there anything else you desire to add, Mr. Wells?

Mr. WELLS. That is all I have, sir.

Senator ELLENDER. Thank you very much, Mr. Wells.

(The statement referred to is as follows:)

SUPPLEMENTAL STATEMENT ON THE NEED FOR ANALYSIS OF ECONOMIC PROBLEMS IN PRESENT AND POTENTIAL IRRIGATION AREAS

The following questions will be tackled in the proposed research on economic problems in present and potential irrigation areas. They are essentially an elaboration of the general question, How can farming be made most profitable in irrigation areas? Studies will be made in specific areas as a part of the Department program of research on irrigation that has been developed with the Bureau of Reclamation. The studies will be designed for appraisal and guidance of specific development projects, but much of the information will have application to other irrigation areas in the same general region.

1. What sizes and types of farms will pay best under the conditions that are likely to prevail in the area? To obtain practical answers to this question, information developed by soil and crop specialists on the kinds of crops most suited to the area and the yields to be expected under different conditions must be combined with economic information on prospective costs and prices in view of the potential market outlets for the products that can be grown. From prospective yield, price and cost information, the receipts, expenses, and net income that can be expected from different combinations of different crops and livestock are estimated; and the best-paying systems of farming are determined after analyzing income results from different possible combinations of crop and livestock production.

This type of information is needed to provide a guide for successful settlement of a new project and to suggest ways of improving farming systems on older projects in order that farmers may earn more satisfactory returns on investments that they already have made. For example, a study of the tricounty irrigation area in cooperation with the University of Nebraska indicated that net income to the farm family on 160-acre farms could be increased two to four times above

prevailing levels if more of the land were brought under irrigation, and if more livestock were kept.

New settlers on irrigation projects have to make decisions concerning size of farm, type of farming, investment in buildings, etc., that most likely will affect their incomes over their entire farming careers. The tricounty study and other similar research indicate that determining the best-paying systems of farming in an area and effective use of such information by the Extension Service, Farmers' Home Administration, and other agencies in their work with farmers could make a difference in annual net income of $1,000 or more per farm. On a relatively small irrigation project of 300 farms, that would mean an added income of $300,000 a year.

2. What are the possibilities for combining irrigation farming with the use of surrounding dry land and range? Where the use of all the land resources of an area can be integrated in this way, irrigation development will result in greater income stability because ranchers and dry-land farmers will have feed-base protection in drought years. Also, irrigation farmers will be less dependent upon markets for specialized crops.

In many western areas the question of relative returns from farm flocks of sheep, beef, and dairy cattle needs to be reexamined in the light of market prospects over a period of years. It seems quite likely, especially in areas where surrounding range is available, that irrigation development can result in profitable increases in sheep and cattle production. These products have a wide market, and the long-time outlook seems favorable; also, farming systems built around these enterprises will emphasize hay and pasture. Therefore, they will tend to conserve soil resources, and at the same time meet increasing demands for meat and wool.

3. How much will farmers have to invest in order to develop the best paying types and sizes of farms? What investment will be required for land, livestock, and machinery for the size of farm that a family can handle of the types adapted to the area? With prevailing prices of land, livestock, and equipment, the investment for a new irrigated farm often runs from $25,000 to $35,000.

What kinds of credit arrangements will be needed to get started on such farms, to develop them, and to carry on the year-by-year operations? What kinds of repayment schedules are suited to the income prospects in the development period? Farm investment, income, and expense budgets for different types of farms will be worked out year by year for the development period. These budgets will furnish a guide to credit agencies in extending credit and in gearing repayments to prospective income.

4. What effect will the rate of farm development have on investments and on resulting incomes? Answers to this question will be needed in order to determine whether a considerable acreage of land should be leveled and prepared for irrigation on each farming unit before settlement.

A study made some years ago of settlement progress on the Vale-Owyhee project in eastern Oregon is of interest in this connection as well as in relation to credit needs. In the early years of settlement, farmers could develop only a part of their irrigable land; they had very few livestock; and many didn't know how to care for irrigated crops. The result was that they had poor crop yields, low returns from livestock, and extremely low incomes. From 7 to 8 years were required for fairly satisfactory progress. Unless the farm family had financial resources of its own or adequate credit, they could not survive the long development period.

5. If efficient farming systems are developed, how much will farmers have available to pay for water development, including both construction and maintenance charges? Answers to this question involve determining what farmers are likely to have left after paying operating expenses, depreciation, interest on investment, taxes, and necessary family living expenses.

A study now being completed in the Weber Basin of Utah indicates that about twice as much class 3 land would be required to obtain the same net income as on class 1 land in that area. This means of course that more of the poorer land would be in hay and pasture with greater dependence on livestock and less on cash crops. The net income per acre that would be available to pay irrigation charges would be very much less on the poorer land.

Information of this type is needed by the Bureau of Reclamation in setting payment schedules, but for that purpose it should be recognized that an income incentive is needed to undertake irrigation farming. Also, allowance will need to be made for years of low income resulting either from poor yields or low prices; and for the fact that some farmers will not obtain yields as high as the average of the area.

6. Special studies will be made of prices and market prospects for products of irrigation areas as a basis for projecting prices and cost rates that can be used in

estimating prospective incomes from irrigation farming. Some cash crops such as potatoes have a limited market, which could be easily flooded with large increases in production. Many fruit and vegetable crops that would grow well in irrigated areas will have only limited expansion possibilities because of market prospects. Livestock products, on the other hand, are likely to have a wider market, but feed crops and livestock usually mean less intensive farming and lower per acre value of production.

7. When sufficient progress has been made in the production and marketing analyses, estimates will be made of production to be expected from irrigation areas, region by region, in order to relate potential supplies with market outlets. Such comparisons may indicate the need for revision of development plans, especially with respect to production of commodities that have a limited market.

Most of the market outlook analysis can be done either on a national or regional basis with special attention to local variations. But the other problems will need to be studied for specific areas, although many of the results will have region-wide application. The specific areas and problems that require most urgent attention will be determined in cooperation with the Bureau of Reclamation and the State experiment stations. Preliminary discussions with the Bureau of Reclamation indicate urgent need for studies of the sizes and types of farms that will pay best in the Missouri-Souris and Oahe areas in the Northern Great Plains; also in the Minidoka extension (north-side pumping division) of the Middle Snake River projects and the Columbia Basin project in the Pacific Northwest. Farm development, settlement, and credit problems seem most urgent in the Columbia Basin, the Heart Mountain division of the Shoshone project in Wyoming, the W. C. Austin project in Oklahoma, and the Tucumcari project in New Mexico.

Experience in some of the older irrigation areas will be studied as a basis for developing suggestions for settlement of the newer areas. In the Snake River and Shoshone projects the older developments are adjacent to the newer areas and the information will have direct application. In other areas, allowance will have to be made for differences in production, market, and other conditions. But, as previously indicated, some of the results will have region-wide application.

## Agricultural Research Administration

### SALARIES AND EXPENSES

### STATEMENTS OF DR. B. T. SHAW, RESEARCH ADMINISTRATOR; DR. H. C. TRELOGAN, ASSISTANT ADMINISTRATOR, MARKETING PROGRAMS, AGRICULTURAL RESEARCH ADMINISTRATION; F. H. SPENCER, ASSISTANT ADMINISTRATOR, AGRICULTURAL RESEARCH ADMINISTRATION; E. L. STRUTTMANN, BUDGETARY AND FISCAL OFFICER, AGRICULTURAL RESEARCH ADMINISTRATION; AND RALPH S. ROBERTS, DIRECTOR OF FINANCE AND BUDGET OFFICER, UNITED STATES DEPARTMENT OF AGRICULTURE

#### BUDGET ESTIMATE

Senator Ellender. The next request is for funds to operate the Agricultural Research Administration, and I notice that Dr. Shaw is present in order to justify this appropriation according to the justification before me.

Dr. shaw, I understand that you have a general statement to present to the committee covering the whole Research Administration.

Dr. Shaw. Yes, sir, I would like to present that.

Senator Ellender. And I notice that for your office in particular you are asking for fiscal 1953 for $581,000.

Dr. Shaw. Yes, sir.

Senator Ellender: And you were given last year $582,440.

Dr. Shaw. Yes, sir.

Senator ELLENDER. It has been brought to my attention that, with respect to the Agricultural Research Administration, the entire amount that was appropriated to run the various bureaus, such as the Bureau of Animal Industry, et cetera, during the fiscal year 1952 was $70,867,816, and the budget estimate for 1953 is $75,347,708, an addition of $4,479,892. That is a comparison of the budget estimate for 1953 in contrast to what you received for 1952.

As I understand it, your statement is going to be general so as to cover this whole appropriation, and you will be specific as to the one dealing with your own office.

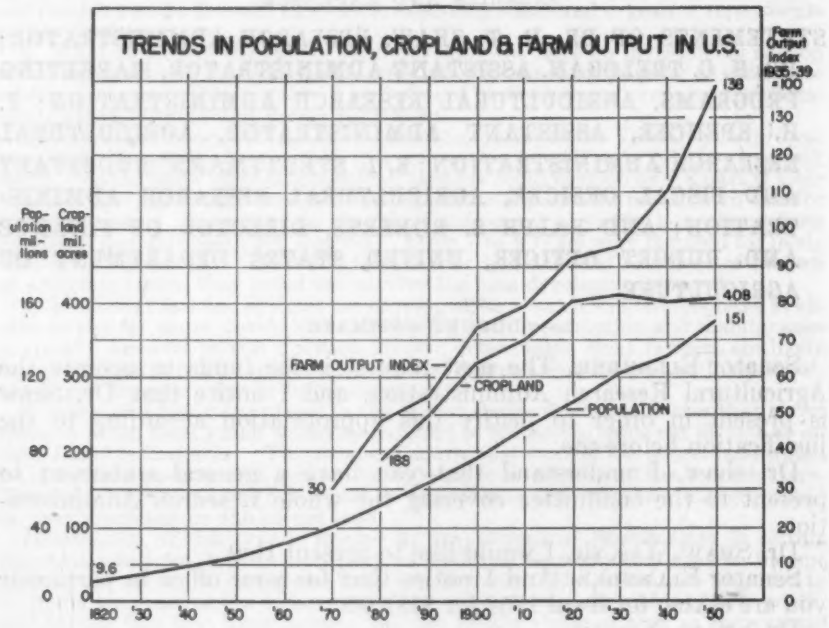
Dr. SHAW. Yes, sir. Of the amount of $4,479,892, $3,839,000 represents the Pay Act supplemental for 1952. There is also a transfer of $571,072 in the 1953 estimates for continuing certain research and inspection activities previously carried under the foot-and-mouth-disease appropriation. The net increase in 1953 over 1952 is, therefore, only $69,820.

Senator ELLENDER. You may proceed, Doctor. Have you a written statement?

## FARM TRENDS

Dr. SHAW. No, sir, Mr. Chairman; I do not have a prepared statement. I have made an analysis of what I consider to be the job ahead for all of us in Agriculture. I think it has considerable bearing on what the research program needs are. It will not take me too long; so, I would like to discuss that with you. I have a manila folder that I have presented to the committee with some charts in it. Will you look at that first chart under table 1?

(The chart referred to follows:)



AGRICULTURE IN RELATION TO POPULATION

Dr. SHAW. I have intended to show in that chart what has happened to agriculture in a considerable period of the past. In the chart we have gone back as far as we had comparable statistical data. You will notice the bottom line in the chart shows the population of the whole United States beginning in 1820 with the population of 9.6 millions and going up to the end point in this chart of January 1, 1950, which has 151 million. Of course, today, our population is actually even greater than that—it is up to 155 million.

The second line shows the cropland that we have used for producing products for our people. The first figures we have for that on this comparable basis were from 1880, where we had 188 million acres of cropland. You will notice that that increased rather steadily up to about 1920 and then leveled off for the last period of about 30 years. We had 408 million acres of cropland available for use in 1950.

The third line, the top line, shows the farm output. It is an index figure based on 1935–39 equaling 100. You will notice that back in 1870 we had 30 percent of the 1935–39 production, and that increased regularly on up to 1950 where the index of production was 138.

If you compare those three lines together, you will notice that up until the period of about 1920 we provided for the increased needs of our increasing population by bringing in more croplands; but if we go beyond 1920 where cropland has leveled off, the farm-output has continued to rise.

In the first 10 years or so beyond 1920, 1920–30 particularly, a large part of the increase came from the fact that land was released from feeding horses and mules, and was now available for other uses. But as we go on from 1930 to 1950 we have had, as you know, a continual reduction in horses and mule numbers, and we have had a continuous contribution of land from that source; also, there has been a tremendous increase in farm output by the route of improved technology.

With that as a little background I would like to examine more closely our immediate past in my second chart.

Senator ELLENDER. Before you go into that, Doctor, do any of your charts show how much of the land formerly utilized for feeding horses and work animals that is now being devoted to primary agriculture?

Dr. SHAW. This next chart I think will show that fairly well.

Senator ELLENDER. I have another question before you go into that. I notice that since 1920, as you have indicated, the amount of cropland has been more or less constant in the neighborhood of 408 million acres.

Dr. SHAW. Yes, sir.

Senator ELLENDER. That does not mean that new lands have not been taken in, does it?

Dr. SHAW. Well, there have been some little increments coming along.

Senator ELLENDER. As to the land that has become so eroded that it is no longer productive, have you deducted that or have you compensated for that in offsetting what you have added as new land?

Dr. SHAW. I am sure that in the figure there are both additions and subtractions.

Senator ELLENDER. In other words, submarginal lands have been subtracted from the increase in lands, the new lands that you have put in this year?

Dr. SHAW. Yes, sir.

Senator ELLENDER. So that the net result has made it more or less constant?

Dr. SHAW. Yes, sir.

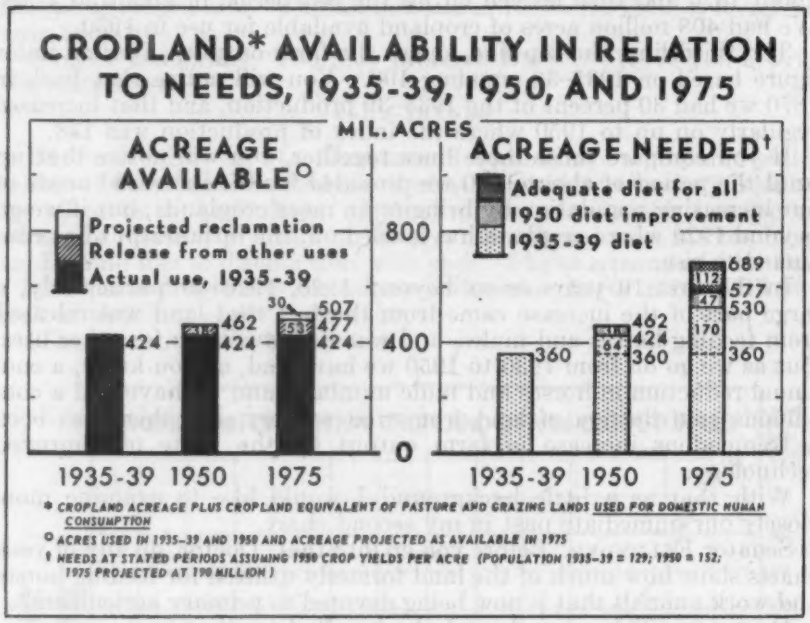
Senator ELLENDER. Do any of your charts indicate how much more land we have that we can take in?

Dr. SHAW. That is the direct thing I am going to discuss in this next chart.

Senator ELLENDER. Very well; I am sorry I anticipated you.

Dr. SHAW. That is perfectly all right, sir.

(The chart referred to follows:)




Dr. SHAW. In this chart what I have tried to do is to relate the acreage that we have had available in the recent past, and are likely to have available in the near future, with our needs for agricultural products. Now, because of the fact that we get such a large part of our food supplies through the route of livestock it has been necessary to take account of the pasture and grazing lands as well as the croplands. In order to do that, what was first done was to figure out the cropland equivalent of the pasture and grazing lands and add that on to the croplands.

ACREAGE AVAILABLE, 1935–39

In 1935–39, we had an average of 424 million acres of cropland equivalent to provide goods for domestic human consumption. I have ruled out exports in this chart and will talk about that in a few minutes. The whole chart is based upon providing goods for domestic human consumption.

ACREAGE AVAILABLE, 1950

Now, then, by 1950 we had increased our base of 424 million acres for domestic human consumption up to 462 million acres of cropland equivalent. The net change of 38 million gets right at our horse and mule numbers that you asked a question about a minute ago. Actually the 38 million is a net of both plusses and minuses. There were released from the requirement of feeding horses and mules between the 1935–39 period and 1950, 45 million acres of cropland equivalent. As you know, we are using in 1950 more land to provide goods for export than we did in this period.

Senator ELLENDER. When you say "this period" you mean 1935–39?

Dr. SHAW. Yes, sir. We are using more land to provide goods for export in 1950 than we did in 1935–39, and the net of all of the effects is that we ended up by having 38 million acres more for providing products for domestic human consumption.

LOOKING AHEAD TO 1975

Now, taking a look into the future, in 1975 we can expect, by following the trends in further reductions in horses and mule numbers, that we will have another release of about 15 million acres of cropland equivalent that are now required to feed horses and mules, giving us then a total of 53 million acres over the 1935–39 base that previously was required for feeding horses and mules.

ACREAGE FOR FEEDING HORSES AND MULES

In 1950 we were using 33 million acres of cropland equivalent to feed horses and mules. I have taken off another 15 of that by 1975, so I have left then only 18 million acres in 1975 still required to feed horses and mules. In other words, we are getting pretty close down to the bottom of the barrel from that source.

PROJECTED AVAILABILITY OF CROPLAND EQUIVALENT

This other 30-million-acre increment that I have on the top of the bar was taken directly from the President's Water Resources Commission report where they studied the plans of the Bureau of Reclamation, Army engineers, the Department of Agriculture, and looked at all of the programs for irrigation, for flood control, for drainage, for land clearing, and so forth. After studying all of the proposals and projected plans, they came up with an estimate that by 1975 it would look possible to bring in the equivalent of 30 million acres of land from all of those activities.

Senator ELLENDER. That is from irrigation and cleared land, et cetera?

Dr. SHAW. And drainage and the whole thing. Actually in their 30-million figure they had assumed in terms of their estimate that about 6 million acres of new land would be brought in by irrigation. Now, the 6 million brought in by irrigation would yield more than average croplands. Equating that to average cropland would give

about 9 million acres. In other words, out of the 30 million estimate, about 9 million acres of average cropland is considered from irrigation.

Senator ELLENDER. But you are simply figuring 6 million acres?

Dr. SHAW. Six million is the land that will come in.

Senator ELLENDER. I see.

Dr. SHAW. The other is from drainage and land clearing and so forth. I am sure the President's Water Resources Commission group that made the study would not want to infer, nor would I want to infer, that 30 million acres was all the land we had left, because there is more land that can be irrigated. I believe the Bureau of Reclamation has estimated in terms of the water supply that we could probably go as high as 22 million.

Senator ELLENDER. There is more land to be irrigated, but the only question is whether or not the supply of water is present in sufficient volume.

Dr. SHAW. Yes.

Senator ELLENDER. As you know, they are making fine headway with converting sea water into fresh water, and chances are by that time some smart person might find a method to convert this sea water easily and transport it to the Mojave Desert in California and other places where we can make the desert grow crops.

Dr. SHAW. Yes, sir.

Senator ELLENDER. In all of these estimates that you have made here wherein you indicate from present studies that in 1975 you will have 507 million acres of cropland, have you taken into account the vast number of acres that are submarginal, that are no longer classified as croplands?

Dr. SHAW. As you have seen here—and it is probably what prompted your question—I have not subtracted anything.

Senator ELLENDER. I know. But we are told, and I have said it on quite a few platforms and before our own committee that notwithstanding the advances made in recent years by us, that is, by the Department of Agriculture on our soil-conservation work, there is still floating down to the sea topsoil equivalent to 500,000 acres per year, as I remember the figures. Now, what about that phase of it? Do you think that ought to be taken into consideration?

Dr. SHAW. I do want to talk about it, sir.

Senator ELLENDER. All right.

Dr. SHAW. As you have seen, the only thing I did was add on to the base. Now, I did not take into account in getting at that 507-million-acre figure, one, cropland that we have now that should be put in trees; two, I did not take into account further soil deterioration, and our soils for the Nation as a whole are still going downhill. Those have not been taken into account. Unless we do something about stopping them, certainly that is going to slice acres off this 1975 figure.

What I wanted to have here was what I considered would be a rather optimistic estimate of what land would be available for providing goods for domestic human consumption. And I think it is an optimistic estimate.

Senator ELLENDER. Doctor, you will agree with me, I am sure, that in order to round out your picture and make it more realistic—because that is what you are trying to do—that there should be

subtracted the amount of submarginal lands that will return to pasture, that will no longer be croplands. And the reason I say that is that we may need data of that kind when we come before the Senate to continue our soil-conservation program and the appropriations for that program. It strikes me that if those figures are available it would help us out a lot.

### DECREASE IN SOIL PRODUCTIVITY

Dr. SHAW. The reason I have not taken it into account is because I did not have the figures to make a good estimate; but what you say is certainly true. If you take the whole area of the Midwest, it was estimated here a couple of years ago that the inherent productivity of those soils are going down at the rate of about seven-tenths of 1 percent a year. That is a large area of rather important soils. They are still going down, and unless that is curtailed, certainly it takes some land off of this estimate.

Senator ELLENDER. There is no doubt about it, that it can be curtailed, and that is what we are trying to do through our soil-conservation program.

As I stated awhile ago, notwithstanding the good work that we have been doing recently with soil conservation, there is this loss of 500,000 acres per year. Now, if you project that loss from the present to 1975, as I figure it, we will be short 11 million acres.

Dr. SHAW. Yes; in other words, you would wipe out about a third of what I added on.

Senator ELLENDER. That is exactly right. That will take off of cropland, but of course you put that in another category. Still you have 11 million acres of land on which you produce food for human consumption.

Dr. SHAW. The point you are bringing out is going to make the total story that I have to tell look even worse than the one I have.

Senator ELLENDER. I am trying to make it what I think it really is.

Dr. SHAW. I think you are stating the case.

### ACREAGE NEEDED BASED ON 1950 CROP YIELDS PER ACRE

On the right side of this chart what I have tried to do is to look at our needs for agricultural products. So that I would have a uniform measuring stick I have converted everything to the basis of 1950 crop yields per acre. If we had had a 1950 yield level per acre in the period 1935 to 1939 it would have required only 360,000,000 acres of cropland equivalent to provide the goods that were provided by the 424 million acres of cropland equivalent used in 1935–39. That was at the diet levels that we were experiencing in 1935–39.

If you will subtract this figure from that one, 360 million from 424 million, and get a difference of 64 million acres, that is an interesting measure of what we have accomplished in all of our agricultural improvements, soil conservation, all of our new varieties, our fertilizers, and the whole gamut of improvements that we have made. We have achieved in the interval from 1935–39 to 1950 the equivalent of 64 million acres of croplands. That is in terms of products for the people.

CURRENT AVAILABILITY OF CROPLAND EQUIVALENT

In 1950, as was indicated on the other side of the chart, we did have available 462 million acres of cropland equivalent for providing the goods for domestic human consumption. I drew the base line that I had had for the 1935 period on the 1950 bar, 360 million acres, so that I could show the amount of cropland that was required to feed the increase in population that we had between 1935–39, which was 129 million, up to 1950, which was 152 million. It required the equivalent of 64 million acres to provide for the increased population at the diet rate that we had in 1935–39. In other words, if we had not had this windfall of the 38 million acres that previously had been used to feed horses and mules, we would not have had the products to bring about the diet improvement that we have had. And, as you know, that is represented by diet improvement in two ways: One, an increased consumption per capita, and two, a movement in the direction of more livestock products, more fruits and vegetables, and so forth.

The improvement that we had in 1950 over 1935–39 is represented by the products from 38 million acres of cropland equivalent.

CROPLAND EQUIVALENT REQUIRED BY 1975

Now, consider our needs in 1975. I have used in developing this chart for 1975 a population of 190 million people. That is the estimate of the Census Bureau as to what they assume will be the population under moderately favorable conditions. Actually, if our population continued to increase at the rate it increased last year, we would go to 190 million people by 1966 rather than 1975. So, again, I think that our estimate is on the conservative side.

CROPLAND EQUIVALENT REQUIRED TO MAINTAIN 1935–39 LEVEL OF DIET

It is going to take the products from 530 million acres of cropland equivalent to feed the 190 million people at the diet rate that we had in 1935–39. That 530 million acres is 68 million acres more than we used to feed the population in 1950. It is 23 million acres more than that rather optimistic estimate of the land that might be available in 1975. Certainly we would want to do better than that in terms of our population needs in 1975. We would all want to at least continue the distribution of products and the diet levels that we have now. If we would continue into 1975 the same kind of diets that we have now, it would require another 47 million acres of cropland equivalent to do it. In other words, it would require a total of 577 million acres of cropland equivalent, which is 115 million more than we are now using, and 70 million more than my estimate of availability.

CROPLAND EQUIVALENT REQUIRED TO MAINTAIN ADEQUATE DIET

We might wonder why I would add anything else to the top of this bar, but I have added 112 million acres of cropland equivalent. That was the amount of land that would be required if everyone in the Nation had an adequate diet. By that I mean bringing the people who do not have an adequate diet up to an adequate level. Certainly that is probably far too optimistic to assume, that we could

do it by 1975. If we assume that we could make as much improvement in the period from 1950 to 1975 as we made in the period from 1935 to 1939 to 1950, it would require another 47 million acres. Take it roughly at 50 million, and you would have a total of 627 million acres of cropland required if we get as much diet improvement between now and 1975 as we achieved in the period 1935–39 to 1950.

That is 165 million more than we are now using. It is 120 million more than the rather optimistic estimate of what we might have available.

Senator ELLENDER. That we can foresee.

### ALTERNATIVE METHODS OF GETTING NEEDED PRODUCTS

Dr. SHAW. Yes; now, then, where are we going to get the products that are represented by that 120 million acres of cropland? Certainly some people would say, "Well, we can import them." If we consider our situation in relation to that of the rest of the world, certainly the needs for products in the rest of the world are going to be greater than ours just to maintain their standard of living without even bothering to increase it. I would think our chances of relying on that source for products are rather slim.

The next suggestion might be: Let us cut off all of our exports. We used 40 million acres of cropland equivalent to provide goods for export in 1950. If we cut them all off we would still have 80 million to go. And I think again, if you consider our situation in the world, we are going to have to provide some such margin of exports as represented by that 40 million acres. So I think we get back around to the fact that our chief point of reliance in providing those goods has got to be still further improved technology.

If we consider that that is the case, the size of the job is apparent. We have achieved in the period 1935–39 to 1950 the equivalent of 64 million acres of land. We have got to achieve in the next period the equivalent of 120 million acres of land.

### RECENT RESEARCH ACCOMPLISHMENTS

Now, I am sure we all feel proud of what we have accomplished in this recent period. It had hybrid corn in it, we had three times the fertilizers, we had DDT. We have made tremendous progress, and we are all proud of it. This job ahead is twice as big. We got 10 bushels to the acre out of hybrid corn. We have to get 20 bushels more. It is really going to be a rather tremendous job.

Senator ELLENDER. Before you leave that chart, I wonder if you would be good enough to put in the record at this point, if it is not too long, what you describe as an adequate diet for all, and what is consists of. I think it would round out the picture better.

Dr. SHAW. I would be glad to do that.

(The information requested follows:)

### EXPLANATORY NOTE FOR CHART CROPLAND AVAILABILITY IN RELATION TO NEEDS, 1935-39, 1950, AND 1975

IN USDA Technical Fulletin 963, Efficient Use of Food Resources in the United States, Christensen indicates that food consumption would need to be about 20 percent above that of 1942 to bring all the people then getting meals that were less satisfactory than a moderate-cost nutritionally adequate diet up to that level.

The per capita index of food consumption for 1942 was 109, which increased by 20 percent, would suggest that an index of about 130 (1935–39=100) is needed to reach this goal. This percentage has been applied to the 530 million acres (shown on the chart as needed in 1975 to maintain the 1935–39 diet level) to produce the 689-million-acre equivalents indicated. Improvement by 1950 over the 1935–39 diet level has utilized about 47 million of these acre equivalents, leaving around 112 million for the job ahead. The moderate-cost diet used for these calculations gives emphasis to consumption of the protective foods such as leafy, green, and yellow vegetables, fruits and livestock products. See USDA Miscellaneous Publication 662, Helping Families Plan Food Budgets.

Senator ELLENDER. You may proceed.

RESEARCH OBJECTIVES

Dr. SHAW. Now, in doing that job—and certainly I think the job can be done—it is going to require that we do something about stopping soil deterioration or further soil deterioration. It is going to require that we do something about the ravages of insects and diseases that we have. It is going to require that we have improved varieties of all of our crops. We are going to have to develop better feeding methods for livestock. We are going to have to breed better cattle. In short, we are going to have to do everything possible in the way of increasing efficiency on the farm; but that is not all of it.

There are currently rather tremendous wastes in the marketing and distributive channels. We have got to cut out that waste. We must develop better methods of storage to prevent waste. We have got to prevent waste that goes on in the household. We must prevent it in the retail store and all through the marketing and distributive channels. In other words, we have got to develop a better utilization of all of the products that we produce. That better utilization will add acres just the same as increased efficiency on the farm. It is going to be a rather tremendous job for all of us in the years ahead.

TOTAL EXPENDITURES FOR AGRICULTURAL RESEARCH, 1940–51

Now, with that, I would like to look at our fund situation for agricultural research. This table has brought together the funds that were available to the Department of Agriculture and the State agricultural experiment stations.

Senator ELLENDER. At this point we want the record to show this table you are now speaking of.

(See following page.)

Dr. SHAW. In the second column I have the funds that were used by the agencies in the Department of Agriculture. The third column has the Federal money that was made available to the State experiment stations, and the fourth column has the funds that were made available from non-Federal sources to the State experiment stations. If you will look at those three columns you will see that in terms of the second column, the Federal funds used by the Department agencies went up from $21,806,000 in 1940, to a high in 1950 of $45,864,000.

*Expenditures for agricultural research by the United States Department of Agriculture and by State agricultural experiment stations during 12-year period from 1940–51, comparative buying power in terms of 1935–39 dollars, and comparison with gross farm income*

| Fiscal year ending June 30 | Expenditures for research | | | | Total research expenditures (col. 5) adjusted to buying power of 1935–39 dollars | Total research expenditures (col. 5) per $100 of gross farm income |
|---|---|---|---|---|---|---|
| | By agencies of United States Department of Agriculture | By State experiment stations | | Total | | |
| | | Federal-grant funds | State funds | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | *Thousands of dollars* | *Thousands of dollars* | *Thousands of dollars* | *Thousands of dollars* | *Thousands of dollars* | *Cents* |
| 1940 | 21,806 | 6,848 | 12,635 | 41,289 | 41,664 | 38.2 |
| 1941 | 21,127 | 6,862 | 13,206 | 41,195 | 41,113 | 30.1 |
| 1942 | 21,763 | 6,922 | 13,519 | 42,204 | 39,740 | 22.7 |
| 1943 | 22,433 | 6,871 | 13,954 | 43,258 | 39,361 | 18.9 |
| 1944 | 23,106 | 6,972 | 15,719 | 45,797 | 41,370 | 19.0 |
| 1945 | 23,308 | 6,990 | 17,343 | 47,641 | 42,766 | 18.8 |
| 1946 | 24,834 | 7,190 | 20,787 | 52,811 | 42,866 | 18.3 |
| 1947 | 31,143 | 7,197 | 27,700 | 66,040 | 44,712 | 19.2 |
| 1948 | 35,986 | 8,824 | 35,350 | 80,160 | 51,122 | 23.1 |
| 1949 | 43,060 | 10,604 | 40,305 | 93,969 | 56,269 | 29.4 |
| 1950 | 45,864 | 11,960 | 45,205 | 103,029 | 61,731 | 31.5 |
| 1951 | 43,118 | 12,558 | 50,972 | 106,648 | 60,219 | 28.7 |

Then we drop down in 1951 to $43,118,000. The Federal-grant funds to the State experiment stations went up from $6,848,000 in 1940 to $12,558,000 in 1951. The State funds went up from $12,635,000 in 1940 to a total of $50,972,000 in 1951.

Adding all those together you get the fifth column, which shows that we had a combined total of funds for the State experiment stations and the Department of Agriculture of $41,289,000 in 1940 and $106,648,000 in 1951. That is an increase of about two and one-half times. You will notice, and it is encouraging to note, that the State figures increased about four times. The State figures now are approximately half of the total. It is a better ratio than we have had in the past.

The sixth column was put in this table to show the effect of that increase in funds on our research program. In other words, I had to reflect the buying power of the money. The figures in the sixth column have been based on 1935–39 dollars. In other words, we have gone up from 1940 with a buying power equivalent in 1935–39 dollars of $41,664,000 up to a high in 1950 of $61,731,000, and we dropped down again in 1951 to $60,219,000.

Senator ELLENDER. Doctor, I notice from your table under column 5, the total appropriation was $41,289,000 in 1940. How much service would that have purchased at the present value of the dollar for, say, 1951?

Dr. SHAW. It would have been approximately $24,000,000 worth of service on the basis of the comparable figures.

Senator ELLENDER. All right.

Dr. SHAW. In other words, we have had roughly a 50-percent increase in buying power in the period with two and one-half times as much money.

Senator ELLENDER. In your column 5 I notice you have for 1951 $106,648,000, and in your column 6, $60,219,000. What is the relationship between those two figures? What are you trying to show there?

Dr. SHAW. The $60,000,000 in 1940 would have bought us just as much research as $106,000,000 in 1951.

Senator ELLENDER. That is what I wanted to try and bring out.

Dr. SHAW. This last column, column 7, was put in this table for interest value. What we have done is to take the figures in column 5, the total expenditures for research by the Department and State experiment stations, and figure out the research expenditures per hundred dollars of gross farm income. You will notice back in 1940 we were spending 38 cents per hundred dollars of gross farm income. We dropped off rather rapidly to about 1946 where we got down to 18 cents per hundred dollars of gross farm income. You will remember that we had the Research and Marketing Act come in at about that time. We got up in 1950 to 31½ cents per hundred dollars of gross farm income, and we have dropped back again in 1950 to 28.7 cents.

There is only one comment I would like to make in connection with those figures. A comparable figure in industry would be probably about $2.50 per hundred dollars of sales.

## UNITED STATES GOVERNMENT EXPENDITURES FOR RESEARCH AND DEVELOPMENT

The next table, under tab 4, was compiled to show the over-all expenditures of the Government for research and development for all purposes.

Senator ELLENDER. Without objection, that table will be placed in the record at this point in your remarks.

Dr. SHAW. Very well, sir.

(The table referred to follows:)

*U. S. Government expenditures for research and development (millions)*[1]

| | 1940 | 1951 | Increase | Percent increase |
|---|---|---|---|---|
| All Government | 73.7 | 1,543.0 | 1,469.3 | 1,994 |
| All military | 26.4 | 960.0 | 933.6 | 3,536 |
| Atomic Energy Commission | | 325.9 | 325.9 | |
| Federal Security Agency | 2.8 | 59.9 | 57.1 | 2,039 |
| National Advisory Committee for Aeronautics | 2.2 | 62.5 | 60.3 | 2,741 |
| United States Department of Agriculture | 28.7 | 55.7 | 27.0 | 94 |
| Department of Commerce | 3.3 | 20.7 | 17.4 | 527 |
| Department of Interior | 7.9 | 36.4 | 28.5 | 361 |
| All other agencies [2] | 2.4 | 21.9 | 19.5 | 812 |

[1] With exception of amounts shown for Department of Agriculture, data on 1940 and 1951 expenditures were taken from tables on Government research prepared by Budget Bureau and dated July 25, 1951, and August 15, 1951, which tables exclude economic research. Department of Agriculture figures represent total research expenditures, including economic research. "All Government" figures have been adjusted accordingly.

[2] Federal Communications Commission, General Services Administration, Housing and Home Finance Agency, National Science Foundation, Reconstruction Finance Corporation, Smithsonian Institution, Tennessee Valley Authority, Veterans' Administration, Department of State, and Treasury Department.

Senator ELLENDER. You may proceed, Doctor.

Dr. SHAW. As we are all well aware, the expenditures for research and development in the whole Government for all purposes have increased rather considerably from 1940 to 1951, going from $73.7

million in 1940 up to $1,543,000,000 in 1951, which gives a percentage increase of 1,994 percent, roughly 20 times.

Now, as we all expected to be the case, a large share of that goes for the military. Actually, in the case of all of the military effort, $26.4 million was spent for research and development in 1940. In 1950, $960 million was spent for research and development in the military establishments.

AGRICULTURAL RESEARCH EXPENDITURES COMPARED

I would like to give you just one figure for comparison on that, and I do not want to in any way reflect against the need for research in the Military Establishment. But if you would add all of the money that the Federal Government has made available for agricultural research from 1900 to and including 1952, or a period of 53 years, you come out with a total of $930 million. In other words, we spent on agricultural research less in 53 years than was spent on the military in 1951.

Now, of course, the Atomic Energy Commission also came in between those periods and it has a rather large expenditure for research and development, $325.9 million in 1951. I do not think any of us would want to compare those figures with agriculture. But I think the agencies I have listed in the balance of the chart are somewhat comparable. The Federal Security Agency has had an increase of 2,000 percent; the National Advisory Committee for Aeronautics, 2,700 percent; the Department of Agriculture, 94 percent; the Department of Commerce, 527 percent, and the Department of Interior, 361 percent.

Senator ELLENDER. Doctor, to make a long story short, according to this table the Department of Agriculture has received the least of all of the departments.

Dr. SHAW. Yes, sir.

Senator ELLENDER. And yet food and fiber are the two things that make our Nation tick.

Dr. SHAW. Yes, sir.

Senator ELLENDER. Except for that you could not have the military, except for that you could not have these other departments. And yet you have a lot of Congressmen and Senators who stand on the floor and who argue against a lot of these appropriations, particularly soil conservation, when, as a matter of fact, it is my considered judgment that except for the splendid work that has been done by the Department of Agriculture as demonstrated in these charts that you have presented, we would not have been able to progress as we have. I simply think that the progress has been so great that it ought to open the eyes of not only the Congressmen and Senators, but the people of the whole world.

As you have pointed out here, with much less land and with fewer people we have been able to increase production by over 30 percent.

Dr. SHAW. Yes, sir.

Senator ELLENDER. If that had not happened, where would we be?

Dr. SHAW. In terms of the whole Nation, what would the prices of those goods have been if we had not had that 30 percent?

Senator ELLENDER. We would probably be like a lot of these people in countries that my good friend Mr. Cooper here and I visited on a world tour in 1949. We saw the suffering in other parts of the world, and I believe we can say this: That wherever a country has sufficient fiber and food you do not find much trouble. But if you let those two things lack, you would see what occurs in the Government and to the population as a whole.

Dr. SHAW. Yes, sir.

There are just two comments I would like to make in addition to submitting this table. The 94 percent for the Department of Agriculture, as we have just seen in our other discussions on the buying power of the dollar, actually has not done much more than hold us even. Our costs have gone up roughly 80 percent. So we have gotten very little in the way of program increase in that 94 percent.

The other comment that I would like to make is right along the lines that you were just discussing. In light of the experience that we have had in this Nation, I think that we have every reason to expect as great a return from expenditures in agricultural research as in any other research. And if you will notice here in relation to the other segments of national interest, agriculture is at the bottom of the list—when you compare it with industry, 28 cents as against $2.50.

AGRICULTURAL RESEARCH EXPENDITURES BY FEDERAL AGENCIES AND STATE AGENCIES, 1951

In the last chart I have under tab 5 in the folder, I thought you would be interested in a sort of a visual breakdown of how all of our money is divided up that we have for research in the State experiment stations and the Department. If you will look at the left-hand face of that chart, we have it broken down into the major categories of soils at the bottom, plant production, animal production, farm economics and engineering, marketing, and utilization. On the right-hand face of the chart we have broken those major subdivisions down into the various commodity and functional groups such as dairy cattle, poultry, beef cattle, and so forth.

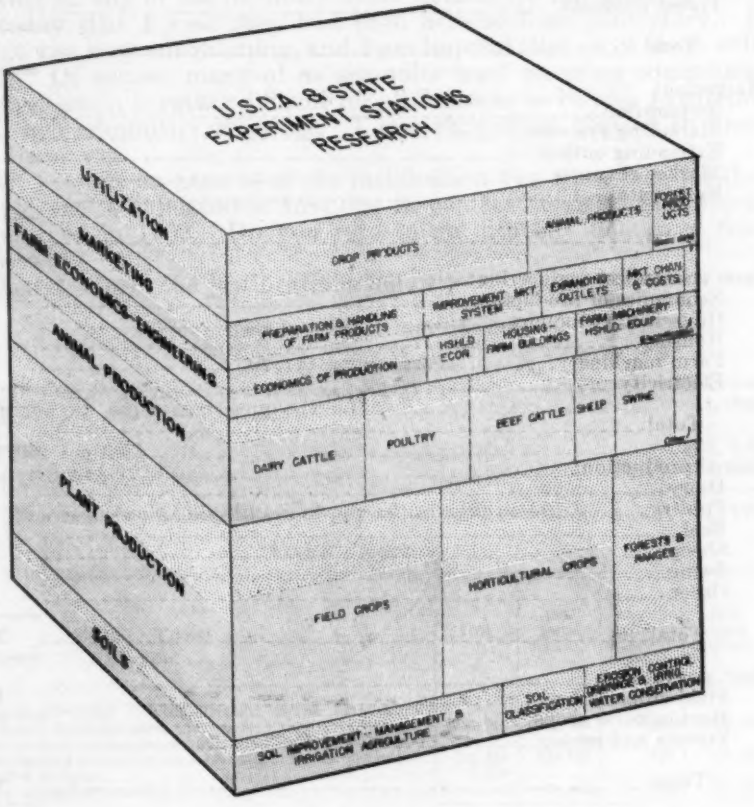
Senator ELLENDER. Without objection, that chart will be placed in the record at this point. Also, Doctor, I wonder if it would be too much trouble for you to break down these figures.

Dr. SHAW. In other words, have a table to compare with this?

Senator ELLENDER. Yes, sir. Let the table be inserted also beneath the chart under tab 5 so that the reader will be able to look at this cube chart, and then read the table which indicates the amount of money that is actually spent for each bureau or department.

Dr. SHAW. We will be glad to do that, sir.

(The chart and table referred to follow:)




— EXPENDITURES BY FEDERAL AGENCIES
— EXPENDITURES BY STATE AGENCIES (Incl. federal-grant funds)

TOTAL - 108.8 million dollars

**Functional analyses of the U. S. Department of Agriculture and State Agricultural Experiment Stations research programs based on estimated expenditures for fiscal year 1951**

*Investment in principal fields of agricultural research by the U. S. Department of Agriculture and the State agricultural experiment stations, fiscal year 1951*

[In millions]

| | Amount |
|---|---|
| Utilization: | |
| Crop products | $11.13 |
| Animal products | 4.72 |
| Forest products | 1.75 |
| Total | 17.60 |
| Marketing: | |
| Preparation | 3.77 |
| Marketing systems | 2.28 |
| Expanding outlets | 1.59 |
| Market channels | 1.19 |
| Basic data | .31 |
| Total | 9.14 |
| Farm economics, engineering: | |
| Economics of production | 3.14 |
| Household economics | .91 |
| Housing | 1.47 |
| Farm machinery | 1.65 |
| Electricity | .37 |
| Total | 7.54 |
| Animal production: | |
| Dairy | 6.50 |
| Poultry | 5.05 |
| Beef | 5.38 |
| Sheep | 1.74 |
| Swine | 2.89 |
| Other | 1.24 |
| Total | 22.80 |
| Plant production: | |
| Field crops | 18.45 |
| Horticultural crops | 15.55 |
| Forests and ranges | 7.38 |
| Total | 41.38 |
| Soils: | |
| Improvement | 5.95 |
| Classification | 1.71 |
| Erosion | 2.72 |
| Total | 10.38 |
| Grand total | [1] 108.84 |

[1] In order to reflect the total research program of the Department of Agriculture and the State agricultural experiment stations, this figure includes research funds of approximately $2,000,000 made available to the Department of Agriculture from outside sources.

Dr. SHAW. You will notice in that chart that we have by the different spacing of the dots shown the amount of money spent in the Department as compared with the amount of money spent in the State experiment stations. As you would probably expect to be the case, the State experiment stations are spending the larger proportion on soils and on plant production and animal production. We are about equally divided on farm economics and engineering. The Federal Government is spending the most on marketing and utiliza-

tion. I think that is a reflection of the different nature of the problems involved.

Mr. Chairman, that completes the general remarks that I desire to make.

Senator ELLENDER. Doctor, I want to say without casting any reflection on any of the members of the committee not being present here today that I wish they had been here to hear your story. I think it was very enlightening, and I am hopeful that all of them will read it. Of course, many of us are quite busy on other committee meetings, and it is rather difficult for all Senators to be able to attend all of their committee meetings. I was very much pleased to hear your discussion.

Now, I notice on page 64 of the justification you are asking for the Office of the Administrator $581,000 in contrast to $582,440 which you received in 1952. Do you care to go into any details of this justification?

(Schedules from the justifications follow:)

AGRICULTURAL RESEARCH ADMINISTRATION

*Office of Administrator*

| | |
|---|---|
| Appropriation Act, 1952 | $541,440 |
| Anticipated pay adjustment supplemental | 41,000 |
| Base for 1953 | 582,440 |
| Budget estimate, 1953 | 581,000 |
| Decrease (partial absorption of pay adjustment costs) | −1,440 |

*Project statement*

| Project | 1951 | 1952 (estimated) | Decrease (pay adjustment absorption) | 1953 (estimated) |
|---|---|---|---|---|
| 1. Administration and over-all direction of the Agricultural Research Administration | $334,715 | $342,800 | −$800 | $342,000 |
| 2. Supervision of maintenance, operation, and furnishing of facilities and services at the Agricultural Research Center | 248,463 | 239,640 | −640 | 239,000 |
| Unobligated balance | 2,638 | | | |
| Total pay adjustment costs | [--------] | [41,400] | [−700] | [40,700] |
| Total available or estimate | 585,816 | 582,440 | −1,440 | 581,000 |
| Transfer in 1952 estimates to "Salaries and expenses, Office of the Secretary of Agriculture" | +9,184 | | | |
| Reduction pursuant to section 1214 | +5,000 | | | |
| Anticipated pay adjustment supplemental | | −41,000 | | |
| Total appropriation or estimate | 600,000 | 541,440 | | |

Dr. SHAW. As you notice, sir, the estimate for 1953 reflects a decrease of $1,440 compared with 1952. The Office of Administrator provides the over-all coordination of the programs of the various bureaus and agencies in the Agricultural Research Administration, and in addition, for operation of the Agricultural Research Center.

Our funds were reduced also in 1952 below 1951, except for the fact that we have a supplemental now in 1952 for the pay increase. Our staff is lower by about 7 in the immediate Office of Administrator than it was in 1951.

Senator ELLENDER. The figure that I indicated for 1952 includes the amount you have asked in the supplemental?

Dr. SHAW. Yes, sir, so that our operations are at a slightly lower level than they were a year ago.

Senator ELLENDER. How much of that money that you are asking for would be used for in-grade promotions? Do you have that figure?

Mr. STRUTTMANN. We estimate that the average salaries will remain relatively constant between the 2 years. That is, within-grade promotions will be offset by people leaving and transferring to other jobs, and others coming in at the bottom of the grade. We have no amount in the estimates for within-grade promotions.

Senator ELLENDER. It evens itself out?

Mr. STRUTTMAN. Yes, sir.

Senator ELLENDER. Is there anything else you care to add?

Dr. SHAW. No, sir; unless you have other questions, that will be all.

Senator ELLENDER. I do not believe there are any other questions.

It is now 12:45, and I presume that it might be advisable to go into a little more detail because this is a large item, and I will ask that you come back tomorrow morning at 10:30.

Dr. SHAW. Very well, sir.

Senator ELLENDER. And we will continue this discussion at that time. Until then the committee stands in recess.

(Whereupon, at 12:45 p. m., Tuesday, March 11, 1952, the committee was recessed to be reconvened at 10:30 a. m., Wednesday, March 12, 1952.)